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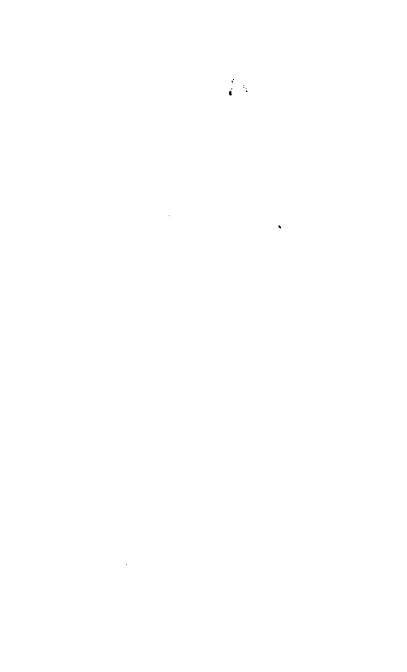


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LIST

OF THE SPECIMENS OF

BRITISH ANIMALS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

PART I.
CENTRONIÆ OR RADIATED ANIMALS.

LONDON:
PRINTED BY ORDER OF THE TRUSTEES.
1848.



INTRODUCTION.

THE principal object of the present Catalogue has been to give a complete List of the British Specimens of Radiated Animals (*Centronia*) contained in the Collection of the British Museum, indicating at the same time the peculiarities of each as regards age, habitation, condition, and the source from whence it has been received.

With this view, the different individuals of each species contained in the Collection are indicated by the letters a, b, c, &c., following the name of the species and its synonyma, and followed by the habitat, state, and the source from whence the specimens are derived.

Those specimens which have been presented to the Museum have the name of the donor; and in general the Collection from whence the specimen has been purchased or procured in exchange is also marked, as it often gives some authenticity to its history. In the adoption of the generic and specific names, it has been thought right to use, whereever it was possible, that which was first applied to the species. As far as regards the specific name, there is comparatively little difficulty in the application of this simple rule; but generic names have been used by different authors in manners so widely different, and the groups which they were meant to designate have been so variously extended and restricted, that it was no easy matter to determine, where several names have been used, which of them ought to be preferred. Great attention has been paid to consult the original authority, to know the type, and select the name which appeared to be the most ancient, and reference is made to the work in which, and the date when, each genus and its synonyma were respectively published.

Under each species there have been appended all the names under which the animal or coral has been mentioned since the establishment of the Linnæan system of nomenclature, and references are given to the works in which these were first used, and especially to the different works treating on British animals in which they are mentioned, and also a reference to the best figures.

The chief part of these references have been extracted from the admirable and classical works of Dr. G. Johnston and Mr. E. Forbes; additional references having been made to some foreign works which have escaped their researches, or to others which have appeared since their publication.

The British Museum is fortunate in having received the chief portion of the specimens from the several authors who originally described the species, so that there can be no doubt of the specimens being the real representatives of the names they bear; for besides possessing the original specimens collected and described by Colonel George Montague and Dr. W. E. Leach; Dr. G. Johnston of Berwick has most kindly presented to the Museum the whole of his Collection, which he used in the preparation of his classical work on this subject; and Mr. Edward Forbes has also most kindly presented many of the specimens described in his work on the British Echinodermata, and Mr. MacAndrew has added to these the specimens more recently obtained in his dredging expeditions.

As the attention to the laws of priority, now so universally adhered to, has caused the alteration of several names used by Dr. Johnston and Mr. E. Forbes, a Concordance showing the changes has been added at the end of the List.

JOHN EDWARD GRAY.

June 12th, 1848.

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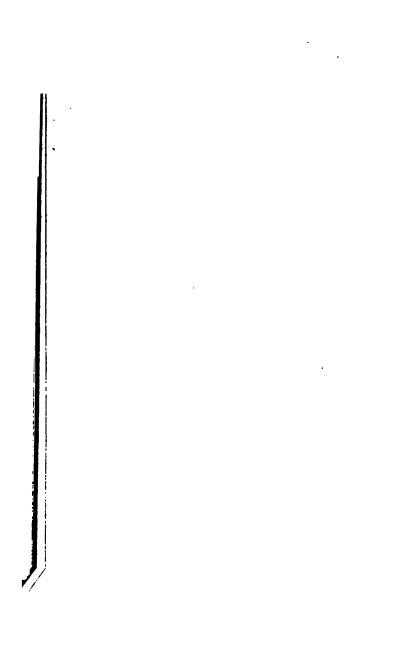
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Centroniæ, Gray, Syn. Brit. Mus. 1841, 131; 1842; Austen, Ann. and Mag. N. H. x. 106, 1842.

Vermes zoophyts, V. lithophyta and V. mollusca pars, Linn. S.N. Animaux apathiques, part., Lam. Ext. du Cour, 1812.

Les Zoophytes ou Animaux Rayonnes, Cuv. Règ. Anim. 1817.

Actinozoaires (Actinozoa), Blainv. Dict. Sci. Nat. 1830.

Acephala, Actinozoa et Phytodozoa, Latr. Fam. Règ. Anim. 1825.

Les Zoophytes, Cuv. Tab. Elem. 640, 1798.

Phytozoa and Cyclozoa, Eichw. Zool. Spec. 1829.

Radiaires and Polypes, Lamk. Syst. 341, 367.

Radiata, Flem. Brit. Anim. 472; Phil. Zool.

Sect. 1. ECHINODERMATA.

Centronia, Pallas, Misc. Zool. (73, 74) 153, 1766.
Echinodermes, Cuvier, Tab. Elem. 643, 1798; R. Anim. 1817;
Latr. Fam. R. Anim. 1825.
Radiaires échinodermes, Lamk. Syst. 343, 1801; Ext. du Cour, 1812.
Cirrhodermaires, Blainv. Dict. Sci. Nat. lx. 1830.
Cyclozoa echinoderma, Eichw. Zool. Spec. 222, 1829.
Echinodermata, Flem. Brit. Anim. 472, 473; Gray, Syn. Brit. Mus. 1840.

Class I. DITREMATA.

Ditremata, Gray, Syn. B. Mus. 1840. Echinus and Holothuria, Linn.; Cuvier. Echinides, Lamk. Syst. 348, 1801.

Order I. ECHINIDA.

Echinus, Linn.

Centroniæ, Hill, Hist. Anim. 196, 1752.

Les Echinides, Lam. Ext. du Cour, 1812; Blainv. Dict. Sci. Nat. lx. 178 (1830); Desmoulin, Act. Soc. Linn. Bord. vii. 1835.

Les Oursins, Cuvier, Tub. Elem. 647, 1798; Règ. Anim. 1817. Les Echinoïdes (Echinoida), Latr. Fam. R. A. 1825.

Echini, Eichw. Zool. Spec. 228, 1829.

Echinida, Macleay, Hora Ent. ii. 116; Gray, Ann. Philos. x. 1825.

Echinidæ, Flem. Brit. Anim. 473, 474.

Cirri-Spinigrada, E. Forbes, Brit. Starf. 15, 1841.

Adelostella, Austen, Ann. and Mag. N. H. x. 111, 1842.

Fam. 1. CIDARIDÆ.

Cidaris, Flem. B. A. 477.

Cidaride, Gray, Ann. Phil. x. 1825; Syn. B. M. 1840; 1842, 115. Cidarites, Agassiz, Prod. Ann. Nat. Hist. i. 305.

1. CIDARIS.

Cidaris, Klein; Flem. B. A. 477; Gray, Ann. Phil. x. 1825. Cidarites, Lamk. 1816; Blainv. Dict. Sci. Nat. 1x. 214; Agassiz, Prod. Ann. Nat. Hist. i. 305.

1. CIDARIS papillata.

Echinus eidaris, Linn. F. Suec. 513; Nilsson, Z. Scand. 11.

E. cidaris? var. a, Sow. Brit. Misc. t. 44.

Cidaris papillata, Leske; Klein, Echid. 125. t. 7. a. & t. 39. f. 2; Fleming, Brit. Anim. 477; Forbes, Brit. Starf. 146, fig. bad; Desmoul.; Duben and Koren, K. Vet. Akad. Hand. 1844, 255. t. 9. f. 25-30, life.

C. Hystrix, Sars, Besk. 40; not Lamk.

C. borealis, Duben and Koren, Ofr. K. Vet. Akad. Forh. 1844, 114.

Piper, Zetlanders. Inhab. North Sea.

Fam. 2. ECHINIDE.

Echinus, Lamk. 1801, 1816.

Echinus, sp. Linn. &c.

Cidarites part., Agassiz, Prod. Ann. Nat. Hist. i. 304.

Echinidae, Gray, Ann. Phil. x. 1825; Synop. Brit. Mus. 1842, 115; Austen, Ann. and Mag. N. H. x. 111, 1842.

1. Echinus.

Echinus, Lamk. 1801; Gray, Ann. Phil. x. 1825; Agassiz, Prod. Ann. Nat. Hist. i. 307; Blaino. Dict. Sci. Nat. lx. 207; Floming, B.A. 478.

Echinus, sp. Linn.; Lamk. 1816.

Echinus a, Flem. Brit. Anim. 478; Duben and Koren, Z. B. 264.

1. ECHINUS Flemingii.

Echinus Flemingii, Ball; Forbes, Brit. Starf. 164. fig. (dry); Agassiz, l. c. 111; Duben and Koren, Zool. Bidrag. 267. t. 9. f. 31, 32 (alive).

E. miliaris, Flem. B. A. 478; Wern. Mem. ii. 246; not Gmelin.

a, b. Adult. Falmouth. W. P. Cocks, Esq.

2. ECHINUS esculentus.

E. marinus, List. An. ii. 169. t. 3. fig. 18; Borlase, Cornw. 278. t. 28. fig. 27.

Echinus esculentus, Linn. Mus. L. U. 705; F. Suec. and S. N.; Pennant, Brit. Zool. iv. 67. fig. 74; Flem. B. A. 478; Duben and Koren, K. Vet. Akad. Hand. 1844, 264; Lamk. Syst. (1801) 346.

E. sphæra, Müller, Prod. 235; Gmelin, 3169; Forbes, Brit. St. 149.

"E. globiformis, Lamk. Hist. ii. 44;" fide Agassiz.

"E. aurantiacus, Blainv.?" fide Agassiz.

E. melo, Lamk. Hist. ii. 44.

a. Frith of Forth. Presented by E. Forbes, Esq.

b, c, d. Frith of Forth. Presented by W. E. Leach, M.D.

e. Falmouth. Presented by W. P. Cocks, Esq.

f, g, h. Series of half-grown and young. Frith of Forth.
i, j, k. Series of young. Whiting Bay, Isle of Arran. Rev. D. Landsborough.

m, n. With the spines. Ilfracombe. Presented by J. E. Gray, Esq.

3. ECHINUS miliaris.

Cidaris miliaris saxatilis, Leske, 82. t. 2. figs. a, b, c, d. t. 38. figs. 2, 3; cop. E. M. t. 133. figs. 1, 2. a, b.

Echinus miliaris, Gmelin, S. N.; Lamk. H. ii. 49, ed. 2. iii. 367; Blainv. Man. Act. 227; Forbes, Brit. Starf. 161. fig.

E. saxatilis, Müller, Prod. n. 2847.
a. Adult. Isle of Man. Presented by E. Forbes, Esq. b, c, d. Young. Isle of Man. Presented by E. Forbes, Esq.

4. ECHINUS lividus.

Echinus lividus, Lamk. H. ii. 50, ed. 2. 367; Blainv. Man. Act. 228; Bennett, Linn. Trans. xv.; Forbes, Brit. Starf. 167. fig. E. lithophagus, Leach, Wern. Mem.; Tilloch, Phil. Mag. xxxix. 100.

 Small, in holes in Nullipora. Cork. John Humphreys, Esq.

b. Cork. Presented by A. G. Melville, M.D.

2. ECHINOMETRA.

Echinometra, Gray, Ann. Phil. x. 1825, 4; Agassiz, Ann. Nat. Hist. i. 306; Blainv. Dict. Se. Nat. 1x. 205, 1830.

Echinometra, sp. Breyn. Echin. 1732; Van Phelsum.

Echinus, sp. Linn.; Lamk. 1816.

Echinus B, Flem. Brit. Anim. 479; Duben and Koren, 276.

1. ECHINOMETRA Dröbachensis.

Echinus Dröbachensis, Müller, Prod. 235.

Echinus neglectus, Lamk. H. ii. 49, edit. 2. iii. 366; E. M. t. 133. fig. 3. a, b; Forbes, Brit. Starf. 172. fig.; Agassiz, iv.; Duben and Koren, Zool. Bidrag. 277.

E. lividus, var. Blainv. Man. Act. 226.

E. saxatilis, Nilsson, Z. Scand. 9; not Müller nor Linn.

E. esculentus, Sv. Zool. viii. t. 48. fig. a (good), b; Oersd. Regio Mar. 70.

E. subangularis, Flem. Brit. Anim. 479; Klein, t. 2. fig. F. t. 3. figs. a, b.

a. Shetland. Presented by E. Forbes, Esq.

b. In spirits. Presented by A. G. Melville, M.D.

Fam. 3. Scutellida.

Scutellidæ, Gray, Ann. Phil. x. 1825, 5; Synop. Brit. Mus. 1840; 1842, 115.

Clypeastres, Agassiz, Prod. Ann. Nat. Hist. i. 302.

Echin. paracentrostomes dentes, Blainv. Dict. Sc. Nat. lx. 195.

1. ECHINARACHNIUS.

Echinarachnius, Leske; Klein, Echid.; Fleming, Brit. An. 479; Gray, Ann. Phil. x. 1825, 6; Agassiz, Prod. Ann. N. H. i. 304 Scutella, sp. Lamk. Hist. ii. 11, 1816.

Echinodiscus, Blaine. Diet. Sc. Nat lx. 199. Lagena, sp. Blaine. Diet. Sci. Nat. lx. 199. Echinarachnius placenta.

Echinarachnius, Leske; Klein, t. 20. fig. a, b; cop. E. M. t. 143. figs. 11, 12.

Echinarachnius placenta, Flem. Brit. An. 479; Gray, Ann. Phil. 6; Agassiz, Prod.; Forbes, Brit. Starf. 178. figs. 178, 181.

Echinus placenta, Gmelin, S. N.

Scutella placenta, Lamk. H. iii. 11, edit. 2. iii. 283; Desmoul. Echid. 228.

Echinodiscus placenta, Blainv. Dic. S. N. lx. 199; Man. Act. 218. Inhab. Zetland.

2. ECHINOCYAMUS.

Echinocyamus, Leske; Klein, Echid.; Gray, Ann. Phil. 1825, 6; Fleming, Brit. An. 481, 1828; Blainv. Dict. S. N. lx. 195. Fibularia, Lamk. Hist. 1816; Agassiz, Prod. Ann. N. H. i. 303. Echinoneus, sp. Goldfuss.

1. ECHINOCYAMUS pusillus.

Spatangus pusillus, Müller, Zool. Dan. 18. t. 91. figs. 5, 6. Echinocyamus pusillus, Flem. Brit. An. 481; Forbes, Brit. Starf. 175. fig.; Gray, Ann. Phil. x.; Agassiz, Monog. Scut. t. 27. fig. 1-8.

Echinus ovalis depressus, Walker, Test. M. R. 25. t. 3. fig. 88.

Ovulum marinum, Borlase, Cornw. t. 28. fig. 26.

Echinus perexiguus, Pet. Gaz. t. 31. fig. 10.

Echinus minutus, Gmelin, S. N. 3194.

Echinocyamus minutus, Blainv. M. Act. 214.

Fibularia ovulum, Lamk.; Blainv. Dict. Sc. Nat. lx. 193.

F. tarentina, Lamk.

F. angulosa, Deslongchamps.

a, b, c, d. A series. Kent.

e, f. "Fibularia pusilla." Berwick on Tweed. Presented by G. Johnston, M.D.

g, h. With spine, green. Arran. Rev. D. Landsborough.

Fam. 4. SPATANGIDÆ.

Spatangidæ, Gray, Ann. Phil. x. 1825, 9.

Spatangi, Agassiz, Ann. Nat. Hist. i. 300, 1838.

Spatangus and Anachitis, Lamk. Syst. i. 347.

Echinides excentrostomes, Blainv. Dict. Sc. Nat. lx. 185, 1830.

1. SPATANGUS.

Spatangus, Klein; Agassiz and Desor, Ann. Sc. Nat. 1847; Gray,
Ann. Phil. x. 1825,8; Agassiz, Ann. Nat. Hist. i. 301 (1838).
Spatangus b, Fleming, Brit. An. 481.

Spatangus c, Blainv. Dict. Sc. Nat. lx. 185.

Echinospatangus, Breyn.

1. Spatangus purpureus.

Spatangus purpureus, Müller, Prod. ii. 2850, Zool. Dan. t. 6;
Leske, Klein, 235. t. 43. figs. 3, 5, cop. E. M. t. 157. figs. 1, 4;
Lamk. H. iii. 29, edit. 2. iii. 324; Flem. Brit. Anim. 489;
Gray, Ann. Phil. x. 1825; Blainv. M. Act. 202. t. 14. figs. 1, 2, 3; Forbes, Brit. Starf. 182. figs. 182, 186; Duben and Koren, Zool. Bidrag. 285. 47; Agassiz and Desor, Ann. Sc. Nat. 1847, 6; Blainv. Diet. Sc. Nat. 1x. 184.

a, b. Adult. Coast of England.

c. Half-grown. Irish Sea. Presented by E. Forbes, Esq.

2. ECHINOCARDIUM.

Amphidetus, Agassiz, Ann. Nat. Hist. i. 301, 1838; Agassiz and Desor, Ann. Sc. Nat. 11, 1847.

Amphidotus, Forbes, Brit. Starf. 190.

Echinocardium, Van Phelsum?; Gray, Ann. Phil. x. 1825.

Spatangus a, Fleming, Brit. An. 480, 1829. Spatangus E, Blaine. Dict. Sc. Nat. lx. 185.

1. ECHINOCARDIUM cordatus.

Echinus Spatangus, Merret, 192; Borlase, Cornw. 278. t. 28. fig. 28; Lister, App. t. 1. fig. 13.

Echinus cordatus, Penn. Brit. Zool. iv. 69. t. 34. fig. 75.

Spatangus cordatus, Flem. Brit. An. 480.

Amphidotus cordatus, Forbes, Brit. Starf. 190. fig.

Amphidetus cordatus, Agassiz; Duben and Koren, Zool. Bidrag.

285; Agassiz and Desor, Ann. Sc. Nat. 1847, 11. Spatangus pusillus, Leske; Klein, 230. t. 24. fig. c, d, e. t. 38.

fig. 5 (not Müller).

Echinocardium pusillum, Gray, Ann. Phil. x. 1825.

Amphidetus pusillus, Agassiz.

Echinus pusillus, Gmelin, S. N. 3193.

Sp. lacunosus, Müller, Zool. Dan. i. 19, 20 (not Linn.).

Sp. flavescens, Abildg. Zool. Dan. t. 91 (not Müller, Prod.); Oersd. Reg. Mar. 81.

Sp. arcuarius, Lamk. H. iii. 31, edit. 2. iii. 328; Blainv. M. Act. 201; Desmoul.; Gold. Pet. Germ. t. 48. fig. 1.

Amphidetus Goldfussii, Agassiz.

a, b. Adult and young, with spines. Coast of England.
Presented by Mrs. Mauger.

c, d, e. Adult, without spines. Melton sands. G. Montague, Esq.

2. ECHINOCARDIUM ovatum.

Spatangus ovatus, Leske; Klein, 252. t. 49. figs. 12, 13; Fleming, Brit. An. 480; Blainv. Zooph.; Desmoul.; Agassiz (not Lank. nor Blainv.). Amphidetus ovatus, Agassiz; Duben and Koren, Zool. Bidrag. 283. t. 10. fig. 50; Agassiz and Desor, Ann. Sc. Nat. 1847, 12. Spatangus flavescens, Müller, Prod. 235, Zool. Dan. i. 19, 20, (not Abildg. Zool. Dan.); Sars, Besk. 40, 46.

Amphidotus roseus, Forbes, Brit. Starf. 194. fig. 194, 196.

Amphidetus ovatus, var. minor, Agassiz and Desor, Ann. Sc. Nat. 1847, 12; Seba, iii. t. 15. figs. 27, 29; cop. E. M. t. 159. figs. 5, 6.

a, b. Dry. Coast of Northumberland. Presented by A. G.

Melville, M.D.

3. Brisstopsis.

Brissiopsis, Agassiz; Agassiz and Desor, Ann. Sc. Nat. 1847, 14. Brissus, sp. E. Forbes, Brit. Starf. 187. Tripylus, sp. Philippi, Erichs. Arch. 1846.

1. Brissiopsis lyrifera.

Brissus lyrifer, Forbes, Brit. Starf. 187. fig. 187; Duben and Koren, Zool. Bidrag. 280. t. 10. fig. 46.

Brissiopsis lyrifera, Agassiz and Desor, Ann. Sc. Nat. 1847, 15. a. Adult. Rothsay Bay, Isle of Man. Presented by Ed-

ward Forbes, Esq. b. In spirits. Shetland. Presented by A. G. Melville, M.D.

Order II. HOLOTHURIDA.

Fistulides, Lamk. Syst. 345, 351; Agassiz, Prod. Ann. Nat. Hist. i. 297.

Fistulida, Macleay, Horæ Ent. ii. 116; Gray, Ann. Phil. 182. Fistulidæ, Fleming, Brit. Anim. 483, 1828.

Cirrhi-Vermigrada, Forbes, Brit. Starf. 15, 1841.

Ascidiastella, Austen, Ann. and Mag. N. H. x. 108, 1842.

Fam. 1. HOLOTHURIDÆ.

Holothuridæ, Gray, Syn. Brit. Mus. 1842, 118.

1. THYONE.

Thyone, Oken, Lehrb. Nat. 1815; Agassiz, Prod. Ann. Nat. Hist. i. 298.

Mulleria, sp. Fleming, Brit. Anim. 1828 (not Jaeger nor Agassiz). Phyllophorus, Grube.

1. THYONE fusus.

Holothuria fusus, Müller, Zool. Dan. t. 10. figs. 5, 6 (not Chiaje).

Synapta? fusus, Jaeger.

Thyone fusus, Agassiz, Prod. Ann. Nat. Hist. i. 298; Duben and Koren, Zool. Bidr. 308. t. 11. fig. 52. t. 5. figs. 42-48; Koren, Nyt. Mag. Naturv. iv. 203. t. 1 (anat.).

Mulleria fusus, Flom, Brit. Anim. 484.

Holothuria papillosa, Abild. Zool. Dan. t. 108. fig. 3, cop. E. M. t. 86. figs. 5, 6; Blaine. Man. Act. 193. t. 13. fig. 2.

Synapta? papillosa, Jueger, Hol.

Thyone papillosa, Oken, Lehrb.; Agassiz, Prod. Ann. Nat. Hist. i. 298; Forbes, Brit. Starf. 233, figs. 233, 235.

Mulleria papillosa, Johnst. Mag. Nat. Hist. vii. 584. fig. 66. Holothuria penicillus, Müller, Zool. Dan. t. 10. fig. 4 (the calcareous ring of the mouth) (not Chiaje).

Pentacta penicillus, Jaeger. Inhab. Berwick Bay. Ireland.

2. THYONE Raphanus.

Thyone Raphanus, Duben and Koren, Zool. Bidr. 311. n. 56, t. 11. fig. 58, t. 5, figs. 49-55; Thomp. Ann. Nat. Hist. 1847, xx. 176.

Inhab. Ireland, Thompson.

2. HOLOTHURIA.

Holothuria, sp. Linn. S. N.; Cuvier; Jaeger.

Holothuria, Lank. Sys. 351, 1801; Blainv.; Duben and Koren, Zool, Bidr. 318.

Fistularia, sp. Lumk. Hist. ii. 1816.

Slelenota, Brandt, Prod.

1. Holothuria nigra.

Nigger or Cotton Spinner, Couch, Ann. & Mag. N. H. xv. 171.

Inhab. Cornwall.

Fam. 2. CUVIERIADÆ.

Cuvieriadæ, Gray, Syn. Brit. Mus. 1842, 118.

1. Psolus.

Psolus, Oken, Lehrh. Nat. 1815.

P. Phantopus, Agassiz, Prod. Ann. Nat. Hist. i. 298, 1838; Jaeger, Hol.

Cuvieria, sp. Flem. Brit. Anim. 492; Duben and Koren, 312; Blaine, Dict. Sc. Nat. lx.

1. Psolus phantopus.

Holothuria phantopus, Strusfenfeldt, Act. Holm. 1765, 256. t. 10; Linn. S. N. 1089; Müller, Prod. n. 2803; Zool. Dan. t. 112. figs. 1, 2, 3, cop. E. M. t. 86. figs. 1, 3; Lamk. Hist. iii. 73, edit. 2. iii. 440.

Cuvieria phantopus, Flem. Brit. Anim. 493; Johnst. Mag. Nat. Hist. ix. 472. fig. 86; Blainv. Man. Act.; Duben and Koren, Zool. Bidr. 313. n. 57.

Psolus phantopus, Jaeger, Holoth. 2, Brandt, Prod.; Agassiz, Prod. Ann. Nat. Hist. i. 299; Forbes, Brit. Starf. 203. fig.

Ascidia rustica, Penn. Brit. Zool. iv. 48. t. 33. fig. 35.

a. In spirits. North Sea.

b, c. Dry, stuffed. Northumberland.

2. Psolinus.

Psolinus, E. Forbes and Goodsir, Brit. Starf. 217.

1. Psolinus brevis.

Holothuria brevis, Forbes and Goodsir, Athenæum, n. 618. Psolinus brevis, Forbes, Brit. Starf. 207. fig. Inhab. Shetland.

Fam. 3. PENTACTIDÆ.

Pentactidæ, Gray, Syn. Brit. Mus. 1842, 118.

1. PENTACTA.

Pentacta, Goldfuss; Agassiz, Prod. Ann. Nat. Hist. i. 299. Cucumaria, Cuvier; Jaeger; Forbes, Brit. Starf. 227; Blainv, Dactylota, Brandt. Ochnus, Forbes, Brit. Starf. 229.

Holothuria, Flem. Brit. Anim. 482.

1. Pentacta frondosa.

Holothuria frondosa, Gunner, Act. Stock. 1767, t. 4. figs. 1, 2, cop. E. M. t. 85. figs. 7, 8; O. Fab. F. Græn. 353; Müller, Prod. n. 2802; Lamk. Hist. iii. 73, edit. 2. iii. 439.

Cuvieria frondosa, Blainv.

Pentacta frondosa, Jaeger, Hol. 12; Agassiz, Prod. Ann. Nat. Hist. i. 299.

Dactylota frondosa, Brandt.

Cucumaria frondosa, Forbes, Brit. Starf. 209. fig.; Duben and Koren, Zool. Bidr. 293. n. 48. t. 4. fig. 1.

Holothuria pentacta, Abild. Zool. Dan. t. 108. figs. 1, 2. t. 124; Vahl. Zool. Dan. t. 123, 127; Sars, Besk. 40.

Holothuria grandis, Forbes and Goodsir, Athenæum, n. 618; not Brandt.

Hol. fucicola, Forbes and Goodsir, Athenaum, n. 618. Cucumaria fucicola, Forbes, Brit. Starf. 227. fig. young.

? Cucumaria pentacta, Forbes, Brit. Starf. 213. fig.

? Holothuria brunneus, Forbes MSS.; Thomp. Ann. Nat. H. 1840.

? Ochnus brunneus, Forbes, Brit. Starf. 229. fig. a, b. In spirits. Shetland. Presented by A. G. Melville, M.D.

2. Pentacta fusiformis.

Holothuria fusiformis, Forbes and Goodsir, Athenaum, n. 618. Cucumaria fusiformis, Forbes, Brit. Starf. 219. fig. Inhab. Shetland.

3. PENTACTA Hyndmanni.

Holothuria Hyndmanni, Thompson, Ann. & Mag. Nat. Hist. 1840, v. 100.

Cucumaria Hyndmanni, Forbes, Brit. Starf. 225. fig. ("bad," Duben); Duben and Koren, Zool. Bidr. 299. 51. t. 11. fig. 56. t. 4. figs. 8-14.

a. In spirits. Presented by A. G. Melville, M.D.

4. PENTACTA lactea.

Holothuria lactea, Forbes and Goodsir, Athenæum, n. 618. Ochnus lacteus, Forbes, Brit. Starf. 231. fig. ("bad," Duben). Cucumaria lactea, Duben and Koren, Zool. Bidr. 297, 50, t. 11. fig. 55. t. 4. figs. 3-7.

a. In spirits. Presented by A. G. Melville, M.D.

5. Pentacta pentactes.

Holothuria pentactes, Müller, Prod. 2806; Zool. Dan. t. 31, fig. 8; Penn. Brit. Zool. iv. 51. t. 26. fig. 41; Flem. Brit. Anim. 482; Lam. Hist. iii. 73, 2nd edit. iii. 441.

Pentacta pentactes, Jaeger, Hol. 12; Agassiz, Prod. Ann. Nat. Hist. i.

Cucumaria pentactes, Forbes, Brit. Starf. 213. fig. 9. Var.? Hol. diequemarii, Cuvier; Forbes, loc. cit. 215.

Hydra corallifera, Gaeriner, Phil. Trans. 1761, 75. t. 1, b. fig. 3, a, b.

Hol. Gaertneri, Blainv. Man. Act. 195.

Holothuria communis, Leach, MSS. Brit. Mus.

a, b, c. d. In spirits. "Hol. communis, Leach." South coast of Devon. Mus. Leach.

e, f. In spirits. "Hol. arcuata," Leach. Devon. G. Montague, Esq. Mus. Leach.

g. Small, in spirits. Torquay. J. R. Griffith, Esq.

h, i, j. Small, in spirits. Holothuria viridis, Leach, MSS. S. coast of Devon. G. Montague, Esq. May be a species?.

6. Pentacta Montagui.

Holothuria Montagui, Flem. Brit. Anim. 483; Leach, Brit. Mus. H. pentactes, var., Mont. Linn. Trans. ix. 112. t. 7. fig. 4; Forbes.

Brit. Starf. 215. fig.
a. Melton sands. G. Montague, Esq. Mus. Leach.
b. Hol. decollata, Leach. S. Devon. G. Montague, Esq. Mus. Leach.

7. Pentacta Neillii.

Holothuria Neillii, Flem. Brit. Anim. 483.

Hol. pentactes, var. Forbes, Brit. Starf. 228.

Hol. Scotica, Leach, Brit. Mus.

6 a. In spirits. Frith of Forth. P. Neill, Esq. Mus. Leach.

Pentacta dissimilis.

Holothuria dissimilis, Flem. Brit. Anim. 483. Hol. pentactes, var. Forbes, Brit. Starf. 228.

Inhab. Leith, Coldstream.

2. Thyronidium.

Thyronidium, Duben and Koren, Zool. Bidr. 1844. Pentacta, sp. Jaeger; Agassiz, Prod. Ann. Nat. Hist. 299. Dactylota, sp. Brandt. Cucumaria and Thyone, sp., Forbes, Brit. Starf. Holothuria, sp. Mont.; Flem. Brit. Anim. 483.

1. THYRONIDIUM pellucidum.

Holothuria pellucida, Vahl, Zool. Dan. t. 135 ("bad," Duben); Flem. Brit. Anim. 483; Forbes and Goodsir, Athenæum, n. 618. Pentacta pellucida, Jaeger; Agassiz, Prod. Ann. Nat. Hist. i. 299. Dactylota pellucida, Brandt.

Thyronidium pellucidum, Duben and Koren, Zool. Bidr. 303.

t. 11. fig. 57. t. 4. figs. 15, 17. Cucumaria hyalina, Forbes, B. Starf. 221. fig. ("good," Duben). Pentacta pentactes, Oersd. loc. cit. 74 (not Linnæus). Inhab. Shetland, Fleming.

2. Thyronidium Drummondi.

Holothuria Drummondi, Thomp. Ann. Nat. Hist. 1840, v. 100. Cucumaria Drummondi, Forbes, B. Starf. 223. fig.

Cucumaria communis, Forbes and Goodsir; Forbes, Brit. Starf. 217. fig.

Thyronidium commune, Duben and Koren, Zool. Bidr. 305. t. 11. fig. 51. t. 4. figs. 18-23.

Thyone Portlockii, Forbes, Brit. Starf. 238.

? Hol. fusus, Oersd. loc. cit. 74?.

? a, b. In spirits. "Holothuria verrucata," Leach, MSS. B.M. S. Devon and Falmouth. J. Cranch, Esq. Mus. Leach.

Fam. 4. SYNAPTIDE.

Synaptidæ, Gray, Syn. Brit. Mus. 1842, 118.

1. SYNAPTA.

Synapta, Eschscholtz, Atlas, 1833; Agassiz, Prod. Ann. Nat. Hist. i. 298.

Fistularia, sp. Blainv. Dict. Sc. Nat. lx. 1830 (not Lamk. 1816).

Tiedemannia, Leuckart.

Holothuria D, Blainv. Dict. Sc. Nat. lx. 1830.

Pentacta, sp. Jaeger.

Dactylota, sp. Brundt.

Mulleria, sp. Flem. Brit. Anim. 484, 1828.

Chirodota, Forbes, Brit. Starf. 239.

I. SYNAPTA inherens.

Holothuria inhærens, Müller, Zool. Dan. t. 31, figs. 1, 7; Sars, Besk. 40.

Cucumaria inherens, Cuvier. Pentacta inherens, Jaeger.

Dactylota inherens, Brandt.

Synapta inherens, Agassiz, Prod. Ann. Nat. Hist. i. 298; Duben and Koren, Zool. Bidr. 322. t. 5. figs. 56-62.

Holothuris digitata, Mont. Linn. Trans. xi. 22. t. 4. fig. 6; Blaine. Man. Actinol. 194.

Fistularia digitata, Lamk. Hist. iii. 76, 2nd ed. iii. 448.

Mulleria digitata, Flem. Brit. Anim. 484.

Chirodota digitata, Forbes, Brit. Starf. 239. fig.

Synapta Duvernæa, Quatrefages, Ann. Sc. Nat. xvii. (1842)?.

a, b. In spirits. Mus. Leach.

c. Fragment of body, in spirits. S. Devon. G. Montague, Esq. Mus. Leach.

d. Fragments, in spirits. "Jemania Cranchiana," Leach, MSS. Brit. Mus. South Devon. J. Cranch, Esq.

e. Fragment of head. "Jemania Montagui," Leach, MSS. Brit. Mus. S. Devon. G. Montague, Esq.

2. SYNAPTA Henslowana.

Jemania Henslowana, Leach, MSS. Brit. Mus. 1819.

a. In spirits. Aberystwith. Rev. John Henslow. May be the young of the preceding.

Fam. 5. SIPUNCULIDAS.

Sipunculidæ, Gray, Spic. Zool. 1828; Syn. Brit. Mus. 1840; 1842, 118.

Vermigrada, Forbes, Brit. Starf. 15, 1841.

Vermistella, Austen, Ann. & Mag. N. H. x. 112, 1842.

1. SIPUNCULUS.

 Sipunculus, Linn.; Lamk. Syst. 352; Leuckart; Flem. Brit. Anim. 491.
 Svriux, Bohadsch; Forbes, Brit. Starf. 245.

1. SIPUNCULUS nudus.

Syrinx, Bohadsch, Ann. Mar. 93. t. 7. figs. 6, 7.

Spunculus nudus, Liun. S. N. 12th edit. 1078; Gmelin, S. N. 3094?; Flem. Brit. Anim. 491; Gray, Spic. Zool. 8; Lamk. Hist. 2nd edit. ii. 469; Leuckart, Breves Animat. Desc. 20. t. 1. fig. 3.

Syrinx nudus, Forbes, Brit. Starf. 245. fig.

Sip. balanophorus, Chiaje, Mem. i. t. 22. fig. 1. Syrinx tessellatus, Rafinesque, Précis, 82.

Spunculus reticulatus, Martin, Obs. M. Worms, 1786, 6. n. 3. t. l. fig. 3.

a. In spirits.

2. SIPUNCULUS papillosus.

Sipunculus papillosus, Thomp. Ann. Nat. Hist. v. 101 (1840). Syrinx papillosus, Forbes, Brit. Starf. 247. fig. Inhab. Clare, Ireland.

3. SIPUNCULUS macrorhynchopterus.

Vermis macrorhynchopterus, Rondel, Zooph. 110. Siphunculus nudus (Naked tube Worm), Penn. Brit. Zool. iv. 36.

t. 20. fig. 10.

4. SIPUNCULUS Harveii.

Syrinx Harveii, Furbes, Brit. Starf. 249. fig. Inhab. Devonshire.

5. SIPUNCULUS Strombi.

Sipunculus Strombi, Mont. Linn. Trans. vii. 74; Flem. Brit. An. 491; Gray, Spic. Zool. 8. t. 6. fig. 1.

18. clavatus, Blaine. Diet. Sc. Nat. Spunculus Dentalii, Gray, Spic. Zool. 8. t.

8. Bernhardus, Forbes, Brit. Starf, 251. fig.

6. SIPUNCULUS Johnstoni.

Siphunculus Johnstonii, Forbes, Brit. Starf. 254. fig. Inhab. Berwick, Johnston.

7. SIPUNCULUS saccatus.

Sipunculus nudus, Martin, Obs. Mar. Anim. 1786, 4. n. 2. t. 1. fig. 2. a, b, c.

S. saccatus, Flem. Brit. Anim. 491; Mont. Linn. Trans. vii. 75. Inhab. Teignmouth, Martin.

8. SIPUNCULUS tenuicinctus.

Syrinx tenuicinetus, M. Coy, Ann. & Mag. N. H. xv. 273. t. 16.f. 4. Inhab. Ireland.

9. SIPUNCULUS Forbesii.

Syrinx Forbesii, M'Coy, Ann. & Mag. N. H. xv. 273. t. 16. fig. 3. Inhab. Ireland.

10. SIPUNCULUS granulosa.

Syrinx granulosa, M'Coy, Ann. & Mag. N. H. xv. 272. t. 16. f. 2. Inhab. Roundstone Bay.

2. PHASCOLOSOMA.

Phascolosoma, Leuckart, Breves Anim. Desc.

1. PHASCOLOSOMA Pallasii.

Sipunculus, Pallas, Misc. Zool. t. 4. figs. 7, 8, 9; cop. Forbes, Brit. Starf. 255. fig. Inhab. Coast of Sussex.

3. PRIAPULUS.

Priapulus, Lamk. Hist. iii. 76, 1816, 2nd edit. iii. 467; Flem. Brit. Anim. 491, 1828; Forbes, Brit. Starf. 256,

Priapules, Lamarck, Ext. du Cour, 38, 1812; Cuvier, Règ. Anim. iv. 24, 1817.

Holothuria, sp. Linn., O. Fab., Müller.

1. PRIAPULUS caudatus.

Holothuria priapus, Linn. S. N. 1091; O. Fab. F. Græn. 355; Müller, Prod. n. 2807; Zool. Dan. t. 94. fig. 1. t. 135. fig. 2. Priapulus caudatus, Flem. Brit. Anim. 491; Lam. Hist. iii. 76, 2nd edit. iii. 467; Forbes, Brit. Starf. 256, fig.

P. hibernicus, M'Coy, Ann. & Mag. N. H. xv. 272. t. 16. f. 1.

a. In spirits. Old collection.

4. THALASSEMA.

Thalassema, Cuvier, Tab. Elem. 1798; R. Anim. 2nd edit. iii. 244. not 1st edit.; Lamk. Syst. 329, 1801; Forbes, Brit. Starf. 259; Mont. Linn. Trans. xi.
Lumbricus, sp. Linn.

1. THALASSEMA rupium.

Lumbricus Thalassema, Pallas, Spic, Zool. x. t.1. fig. 6, cop. E.M. t. 35, figs. 3-7; Gmelin, S. N. 3084.

Thalassema rupium, Lam. Syst. (1801), 329.

Th. mutatoria, Montag. Linn. Truns. xi. 24. t. 5. fig. 2.

Th. Neptuni, Gaertner; Forbes, Brit. Starf. 259. figs. 259, 262; Cuvier, Règ. Anim. 2nd edit. iii. 244.

a, b. In spirits. S. coast of Devon. G. Montague, Esq.

Mus. Leach.

c, d, e. In spirits. S. coast of Devon. Presented by J. E. Gray, Esq.

5. Echiurus.

Echiurus, Echiures, Cuvier, Règ. Anim. 2nd edit. iii. 224; Forbes, Brit. Starf. 263; M. Edw. Règ. Anim. Zooph. t. 22.
Thalassema, Cuvier, Bull. des Sci.; Règ. Anim. 1st edit. ii. 529; Savig. Sys. Annel. 102, 1820.
Thalassema β, Cuvier, Règ. Anim. 2nd edit. iii. 224.

1. ECHIURUS OXYURUS.

Lumbricus oxyurus, Pallas, Misc. Zool. 146. t. 11. figs. 1, 6. Lumbricus echiurus, Pallas, Spic. Zool. x. t. 1. figs. 1, 5.

Thalassema echiurus, Cuvier, Rèy. Anim. ii. 529, 2nd edit.; Lumk. Hist. v. 301, 2nd edit. v. 533; Blainv. Diet. Sci. Nat. Ivii. 499. Th. aquatica, Leach, Ency. Brit. Supp. i. 451.

Th. vulgaris, Savig. Sys. Annel. 102, 1820.

Echiurus vulgaris, Forbes, Brit. Starf. 263, f. 263, 266, 267;
 M. Edw. Reg. Anim. Zooph. t. 22.

lahab. St. Andrews, E. Forbes.

Class II. HYPOSTOMA.

Uypostoma, Gray, Syn. Brit. Mus. 18; Ann. & Mag. Nat. Hist. Noc. 1840, 177.

Stellerides, Agassiz, Prod. Ann. Nat. Hist. 1838, i. 440.

Asteriadie, Flem. Brit. Anim. 485.

Asterida, Müller and Troschel, Asteriden, i. 1842.

Order I. ASTEROIDA.

Asteroida, Gray, Syn. B. Mus.; Ann. & Mag. N.H. Nov. 1840, 178.

Stellerides, Lamk. Syst. 345; Ext. du Cour, 25, 1812.

Stellerida, Macleay, Horæ Ent. ii. 116; Gray, Ann. Phil. x. 1825. Stellata, Eichwald, Zool. i. Spec. 224, 1829.

Stelleridea, Blainv. Diet. Sci. Nat. lx. 214.

Asteriæ, Agassiz, Prod. Ann. Nat. Hist. i. 440, 1838; Müller and Troschel, Aster. 7, 1842.

Asterias, Flem. Brit. Anim. 483.

Cirrigrada, Forbes, Brit. Starf. 14, 1841.

Lobistella, Austen, Ann. & Mag. N. H. x. 108, 1842.

Fam. 1. ASTERIADÆ.

Asteriadæ, Gray, Syn. Brit. Mus. 1840, 62; Ann. & Mag. Nat. Hist. 1840, 178; Forbes, Wern. Trans. viii. 1, ined.

1. ASTERIAS.

Asterias, sp. Linn.

Asterias, Lamk. Sys. 351, 1801; Gray, Ann. & Mag. N.H. 1840, 178. Asteracanthion, Müller and Troschel, Aster. 14, 1842.

Stellonia, Nardo; Agassiz, Prod. Ann. Nat. Hist. 442; Forbes, Wern. Mem. viii. 123.

Uraster, Agassiz, MSS. Ann. Nat. Hist. i. 442; Forbes, B. Starf. 78. Pentasterie, Blainv. Dict. Sci. Nat. 1x. 1830.

1. ASTERIAS rubens.

Asterias rubens, Linn. S. N. 1099; O. Fab. F. G. 369; Müll. Prod. 2831; Retz. Vet. Akad. Hand. iv. 236; Lam. Hist. ii. 562, 2nd edit. iii. 160; Blainv. Man. Act. 239. t. 22. fig. a, B; Gray, Ann. Nat. Hist. 1840, 179.

Asteracanthion rubens, Müll. and Trosch. Ast. 17; Duben and

Koren, Zool. Bidr. 241.

Stellonia rubens, Agassiz, Prod.; Forbes, Wern. Mem. viii. 121. Uraster rubens, Forbes, Brit. Starf. 83, figs. 83, 90.

A. glacialis, Penn. Brit. Zool. iv. 60. n. 54; Flem. Brit. Anim. 487.

A. clathrata, Penn. Brit. Zool. iv. 61. n. 55, young.

Linck, t. 7. fig. 9. t. 11. fig. 15. t. 14. fig. 23. t. 15 & 16. fig. 18. t. 34, 35. fig. 58. t. 40. fig. 70, cop. E. M. t. 92. figs. 3, 4. t. 93. figs. 1, 2.

Tetractis petaloideus, Linck, t. 30. n. 50.

Stella coriaceus vulgaris Luidi, Linck, t. 36. n. 61.

a & b. Adult. Frith of Forth. Presented by W. E. Leach, M.D.

e, f, g. (Not in good state.) Frith of Forth. Presented by W. E. Leach, M.D.

2. ASTERIAS violaceus.

Sol. coriaceus planus, Linck, 33. t. 11. fig. 15.

Asterias rubens violacea, Müller, Zool. Dan. t. 46, cop. E. M.

t. 116. figs. 4, 5.

A. violacea, Gmelin, S. N. 3163, n. 24; Blaine. Man. Act. 239; Lam. Hist. 2nd edit. iii. 256; Ehrenb. Berl. Trans. xxii. 209, t. 8. fig. 9.

Uraster violaceus, Forbes, Brit. Starf. 91. fig.

Ast. Holsatica, Retz. Ast. 22 & 26; Gray, Ann. Nat. Hist. 1840, 179.

Asteracanthion violaceus, Müll. and Trosch. Ast. 16?.

A. minuta, Retz. Diss. 24. jun.?

Asterac. rubens, var. Müll. and Trosch. Ast. 1267.

a. Frith of Forth. Presented by Edward Forbes, Esq.
b. Plymouth Sound. Presented by W. E. Leach, M.D.
c, d. Berwick-on-Tweed. Presented by G. Johnston, M.D.

3. ASTERIAS glacialis.

Asterias glacialis, Linn. S. N.; Retz. Diss. 23; Lam. Hist. ii. 261. n. 26, 2nd edit. iii. 248; Müller, Zool. Dan. Prod. n. 2838; Gray, Ann. Nat. Hist. 1840, 179.

Asteracanthion glacialis, Duben and Koren, Zool. Bidrag. 240. Stellonia glacialis, Nardo, Isis 1834, 716; Agassiz, Prod.; Forbes,

Wern. Mem. viii. 123.

Uraster glacialis, Forhes, Brit. Starf. 78. fig.

A. angulosa, Müller, Zool. Dan. ii. t. 41, cop. E.M. t. 99. fig. 1. Stellonia angulosa, Agassiz, Prod. 25.

A. echinophora, Chiaje, Mem. ii. 356. t. 18. fig. 5.

7 A. Saveresi, Chiaje, Mem.

Sol. echinatus cancellatus, Linck, t. 38, 39, fig. 33, cop. E. M. t. 117, 118.

Pentadactylosaster spinosus, Linck, 35. t. 4. fig. 7, cop. E. M. t. 119. figs. 2, 3.

A. spinosa, Penn. Brit. Zool. iv. 62; Flem. Brit. Anim. 487, jun. Stella hibernica echinata, Pet. Gaz. t. 16. fig. 5.

a, b, c, d. Plymouth Sound. Presented by W. E. Leach, M.D.

4. ASTERIAS hispida.

Stella coriscea acutangula hispida, Linck, 31. t. 9. fig. 19. t. 35. fig. 39.

Asterias hispida, Penn. Brit. Zool. iv. 62, t. 30, fig. 58.

Stellonia hispida, Forbes, Wern. Trans. viii. 123; Brit. Starf. 95. figs. 95 & 99.

Inhab. Anglesea, Pennunt. Isle of Man, Forbes.

Fam, 2. ASTROPECTINIDA.

Astropectinidæ, Gray, Ann. & Mag. Nat. Hist. 1840, 180.

1. ASTROPECTEN.

Astropecten, Linck, de Stellis Mar. t. 27; Gray, Ann. & Mag. Nat. Hist. 1840, 180; Blainv. Dict. Sc. Nat. lx. 220, 1830; Müll. and Trosch. Ast. 67.

Asterias, Agassiz, Prod. Ann. Nat. Hist. i. 441; Forbes, Wern.

Trans. viii. 5.

Stellaria, Nardo, Isis 1834, 717 (not Linn.).

1. ASTROPECTEN irregularis.

Asterias aurantiaca (or auranciaca?), Müller, Zool. Dan. t. 83; Prod. n. 2831 (not Linn.); Lank. Hist. ii. 563?, 2nd edit. iii. 251?; Flem. Brit. Anim. 486; Johnst. Mag. Nat. Hist. ix. 299. fig. 44; Forbes, Wern. Mem. viii. 118; Brit. Starf. 130. fig. Astropecten irregularis, Linck, 27. t. 6. fig. 13; Gray, Ann. Nat.

Hist. 1840, 182.

Ast. irregularis, Penn. Brit. Zool. iv. 61. fig. 57.

Astropecten —, Linck, t. 5 & 6. figs. 5 & 13. t. 8. figs. 11, 12. t. 4. fig. 14. t. 27. fig. 44, cop. E. M. t. 90. figs. 1-5. t. 91. figs. 1-6.

? Ast. Johnstoni, Chiaje, Mem. ii. 356.

? Stella marina minor, Johnst. Hist. Nat. t. S. fig. 11.

Astropecten Mulleri, Müller and Troschel, Wiegm. Arch. x. 1844, 181; Duben and Koren, Zool. Bidrag. 247.

a. Adult.

b, c. S. coast of England. Presented by A. G. Melville, M.D.

2. LUIDIA.

Luidia, Forbes, Wern. Mem. viii. 123, ined.; Brit. Starf. 135;
Gray, Ann. and Mag. Nat. Hist. 1840, 183; Müll. and Trosch.
Ast. 77, 1841; Duben and Koren, K. Veter. Akad. 1844, 113.
Hemicnemis, Müll. and Trosch. MSS. Ast. 77.

1. LUIDIA Savignii.

Asterias Savignii, Audouin, Savig. Echinod. t. 3, 1826.

Luidia Savignyi, Gray, Ann. Nat. Hist. 1840, 183; Mill. and Trosch. Ast. 77; Duben and Koren, Zool. Bidrag. 254.

Asterias rubens, Johnst. Mag. Nat. Hist. ix. 144. fig. 20.

A. pectinata, Couch, Mag. Nat. Hist. n. s. Jan. 1840.
Luidia fragilissima, Forbes, Wern. Mem. viii. 123; Brit. Starf.
135. fig.; Gray, Ann. Nat. Hist. 1840, 183.

Ast. ciliaris, Phil. Wiegm. Arch. iii. 193.

Luidia ciliaris, Gray, Ann. Nat. Hist. 1840, 183.

Asterias n. sp.?, Sars, Besk. 39.

Luidia Sarsii, Duben and Koren, Ofvers. K.V. Akad. Forh. 1844, 113.

a. Body of very large specimen. Isle of Man. Presented by Edward Forbes, Esq.

 A large specimen. Brodick, Arran. Presented by Sir W. C. Trevelvan, Bart.

c, d. Berwick Bay. Presented by G. Johnston, M.D.

3. SOLASTER.

Solasteries, Blainv. Dict. Sc. Nat. lx. 222, 1830.
Solaster, Forbes, Wern. Mem. viii. 121; Brit. Starf. 189; Gray,
Ann. & Mag. Nat. Hist. 1840, 183; Müll. and Trosch. Ast. 26.
Stellonia, sp. Nardo, Isis 1834; Agassiz, Prod. Ann. Nat. Hist. i.
442.

Crossaster, Müller and Troschel.

* ENDECA, Gray.

1. SOLASTER Endeca.

Asterias endeca, Linn. S. N.; Retz. Diss. 26; Lamk. Hist. ii. 560, 2nd edit. iii. 247; Flem. Brit. Anim. 487; Sow. Brit. Misc. 49. t. 24; Johnst. Mag. Nat. Hist. ix. 300. fig. 44; Linck, t. 15, 16. fig. 26. t. 17. fig. 27, cop. E. M. t. 114, 115.

Stellonia endeca, Nardo, Isis 1834; Agassiz, Prod.

Solaster endeca, Forbes, Wern. Mem. viii. 121; Brit. Starf. 109, fig.; Duben and Koren, Zool. Bidr. 243; Gray, Ann. Nat. Hist. 1840, 183; Müller and Trosch. Ast. 26.

A. aspera, Müll. Prod. n. 2833.

a. Adult. Isle of Man. Presented by E. Forbes, Esq.

c, d, e. Adult and young. Frith of Forth. Presented by W. E. Leach, M.D.

f. Scotland. Presented by Mr. J. Johnston.

** Polyaster, Gray.

2. Solaster papposa.

Stella dodedactis, Linck, t. 17. fig. 28. t. 22. fig. 52.

Asterias papposa, Linn. S. N.; Müll. Prod. n. 2832; Retz. Diss. 27; Lamk. Hist. ii. 559, 2nd edit. iii. 246; Flem. Brit. Anim. 487; Johnst. Mag. Nat. Hist. ix. 478. fig. 69.

Stellonia papposa, Agassiz, Prod.

Sciaster papposa, Forbes, Wern. Mem. viii. 121; Brit. Starf. 112. fig.; Duben and Koren, Zool. Bidrag. 243; Gray, Ann. Nat. Hist. 1840, 183; Müll. and Trosch. Ast. 26.

A. helianthoides, Penn. Brit. Zool. iv. 66. fig. 72. A. stellata, Retz.

a. Adult. Presented by E. Forbes, Esq.

b, c, d, e, f, g, h, i. Adult and young. Frith of Forth.
Presented by W. E. Leach, M.D.

4. HENRICIA.

Henricia, Gray, Ann. & Mag. N. Hist. 1840, 184.

Linckia, Nardo?; Agassiz, Prod. Ann. Nat. Hist. i. 441?; Forbes, Wern, Mem. viii. 120 (not Gray nor Micheli).

Echinaster, sp. Müller and Troschel, Ast. 23, 1841.

Cribella, Agassiz, MSS. Ann. Nat. Hist. i. 441?; Forbes, Brit. Starf. 100,

1. HENRICIA oculatus.

Pentadactylosaster oculatus, Linck, 31, t. 36, fig. 62,

Asterias oculata, Penn. Brit. Zool. iv. 61. t. 30. fig. 56; Flem. Brit. Anim. 487.

Linkia oculata, Forbes, Wern. Mem. viii. 120, t. 3, fig. 5.

Cribella oculata, Forbes, Brit. Starf. 100. fig.

Echinaster oculatus, Müller and Trosch. Ast. 24; Duben and Koren, Zool. Bidrag. 241.

Henricia oculata, Gray, Ann. Nat. Hist. 1840, 184.

? A. perforata, Müller, Zool. Dan. Prod. n. 2834?. ? A. multifora, Lam. Hist. ii. 565?.

(Smaller) Asterias seposita, Retz. Diss. 21, not Müll. and Trosch.

Asterias sanguinolenta, Müller, Prod. 234, not Retz.

Echinaster sanguinolentus, Sars, Wiegm. Arch. x. 169, t. 6, f. 1, 2 Echinaster Sarsii, Müller and Troschel, Wiegm. Arch. x. 178. (Larger) Ast. pertusa, Müller, Prod. 234; O. Fab. Nor. Act. Hafn.

xi. (1826) 41. t. 4. fig. 2.
a. Plymouth Sound. Presented by W. E. Leach, M.D.

b, c, d, e, f. Frith of Forth.

g, h, i. Coast of Northumberland. Presented by J. E. Gray, Esq.

2. HENRICIA rosea.

Asterias rosea, Müller, Prod. n. 2837; Zool. Dan. t. 47.

Cribella rosea, Forbes, Brit. Starf. 106. fig. Linkia rosea, Thomp. Ann. Nat. Hist. 1840.

Asteracanthion roseus, Duben and Koren, Zool. Bidrag. 241.

a. Adult. Ayrshire, Philip Maclagan, Esq. Presented by E. Forbes, Esq.

Fam. 3. PENTACEROTIDES.

Pentacerotidæ, Gray, Ann. and Mag. Nat. Hist. 1840, 276. Goniaster, Agassiz, Prod. Ann. Nat. Hist. i. 441.

1. HIPPASTERIA.

Hippasteria, Gray, Ann. and Mag. Nat. Hist. 1840, 279. Asterogonium, sp. Müller and Troschel, Ast. 52, 1841. Pentaceros, sp. Linck. Scutasteries or Platasteries, part., Blainv. Dict. Sci. Nat. lx. 219. Goniaster, sp. Agassiz, Prod. Ann. Nat. Hist. i. 441.

1. HIPPASTERIA equestris.

Pentaceros planus, Link, 21. t. 22. fig. 21. t. 33. fig. 53. Hippasteria plana, Gray, Ann. Nat. Hist. 1840, 279.

Asterias equestris, Gmelin, S. N.?; Sow. Brit. Misc. 8. t. 43, good (not Müller); Lam. H. ii. 555, 2nd edit. iii. 242?; Fleming, Brit. Anim. 485; Jameson, Wern. Mem. i. 559.

Goniaster equestris, Agassiz, Prod. Ann. Nat. Hist. i. 441; Forbes, Brit. Starf. 125. figs. 125, 127.

Asterogonium phrygianum, Müll. and Trosch. Ast. 52. Hippasteria europæa, Gray, Ann. Nat. Hist. 1840, 279.

A. Johnstonii, Gray; Johnst. Mag. Nat. Hist. iv. 146. fig. 21 (not Chiaje); ? Lam. Hist. 2nd edit. iii. 257.

H. Johnstonii, Gray, Ann. Nat. Hist. 1840, 279.

Astrogonium phrygianum, Müller and Trosch. Ast. 52; Duben and Koren, Zool. Bidrag. 246.

a. Four-rayed. "H. Johnstonii," Gray. North of England. Presented by G. Johnston, M.D.

2. HIPPASTERIA abbensis.

Goniaster abbensis, Forbes, Ann. and Mag. Nat. Hist. xi. 280. t. a. St. Abb's Head. Presented by Edward Forbes, Esq.

Fam. 4. ASTERINIDE.

Asterinidæ, Gray, Syn. Brit. Mus. 1840, 62; Ann. and Mag. Nat. Hist. 1840, 288.

1. PALMIPES.

Palmipes, Linck; Gray, Ann. and Mag. Nat. Hist. 1840, 288; Agassiz, Prod. Ann. Nat. Hist. i. 442; Forbes, Wern. Mem. viii. 118.

Asteriscus, sp. Müller and Troschel, Ast. 39.

Anseropoda, Nardo, Isis 1834.

Palmasteries, Blainv. Dict. Sc. Nat. lx. 218.

1. Palmipes membranaceus.

Stella quinquifida palmipes, Linck, 29. t. 1. fig. 2; cop. E. M.

t. 99. figs. 2, 3.

Asterias membranaceus, Retz. Vet. Akad. iv. 238; Diss. 62; Gmelin, S. N. 3164; Lamk. Hist. ii. 558, 2nd edit. iii. 244.

Palmipes membranaceus, Agassiz, Prod. Ann. Nat. Hist. i. 442; Forbes, Wern. Mem. viii. 119; Brit. Starf. 116. fig.; Gray, Ann. Nat. Hist. 1840, 288.

A. placenta, Penn. Brit. Zool. iv. 62. t. 21. fig. 59 a.

A. cartilaginea, Flem. Brit. Anim. 485.

A. rosacea, Lam. Hist. ii. 558.

Asteriscus palmipes, Müller and Trosch, Ast. 39.

a, b, c, d. Adult. Plymouth Sound. C. Prideaux, Esq. Presented by W. E. Leach, M.D.

e. Isle of Man. Presented by Edward Forbes, Esq.

2. PORANIA.

Porania, Gray, Ann. and Mag. Nat. Hist. 1840, 288.

Asteropsis, sp. Müll. and Trosch. 62, 1842; Duben and Koren, 246. Goniaster, sp. Thompson; Forbes, Wern. Mem. iv. 118; Brit. Starf. 122 (not Gray).

1. PORANIA pulvillus.

Asterias pulvillus, Müller, Zool. Dan. t. 19. figs. 1, 2.

Asteropsis pulvillus, Müller and Trosch. Ast. 64, 128; Duben and Koren, Zool. Bidrag. 246.

Asterias gibbosa, Leach, MSS. B.M. 1817 (not Pennant).

Porania gibbosa, Gray, Ann. Nat. Hist. 1840, 288; Jukes, Voy. ii. App. 343.

Goniaster Templetoni, Thompson; Forbes, Wern. Mem. iv. 118. t. 4. figs. 1, 2; Brit. Starf. 122. fig.

Asterias equestris?, Templeton, Mag. Nat. Hist. ix. 237. Ast. irregularis, Fleming, Brit. Anim. 486; not Penn.

a, b. Adult. Plymouth Sound. Presented by W. E. Leach, M.D.

c. Half-grown. Arran. Presented by W. E. Leach, M.D. d, e, g, h. Half-grown.

i. Douglas Bay, Isle of Man. Presented by J. R. Wallace, Esq.

3. ASTERINA.

Asterina, Nardo, Isis 1834; Agassiz, Prod. Ann. Nat. Hist. i. 442; Gray, Ann. and Mag. Nat. Hist. 1840, 289; Forbes, Wern, Mem. viii. 120.

Asteriscus, sp. Müller and Troschel, Ast. 39.

1. ASTERINA gibbosa.

Pentaceros plicatus, *Linck*, t. 36. fig. 62; *Borlase*, *Cornw*. 260. t. 25. figs. 25, 26.

Stellula hibernica glabra, Pet. Gaz. t. 16. fig. 8.

Asterias gibbosa, Penn. Brit. Zool. iv. 62. fig. 59; Fleming, Brit. Anim. 486.

Asterina gibbosa, Forbes, Wern. Mem. viii. 120.

Asteriscus verruculatus part., Müller and Trosch. Ast. 41.

Ast. verruculatus, Retz. Diss. 12.

Ast. membranaceus, Grube, 26.

? Ast. exigua, Lamk. ii. 554, 2nd edit. iii. 241; Chiaje, Mem. t. 18. fig. 1.

Ast. minuta, Blainv. Man. Act. 238.

Asterina minuta, Nardo; Agassiz, Prod. Ann. Nat. Hist. i. 442.

A. stellata obtusa ciliata, Linn. F. Suec. 2112.

A. pulchella, Blainv. F. France, t. ; Man. Act. t. 22. fig. 8. a, b, c, d, e. Plymouth Sound. Presented by W. E. Leach, M.D.

Order II. OPHIURIDA.

Ophiurida, Gray, Syn. Brit. Mus. 1842, 119, 117.

Ophiuræ, Agassiz, Prod. Ann. Nat. Hist. i. 1838, 442; Forbes, Wern. Mem. viii.; Duben and Koren, Bidr. 232.

Ophiuridæ, Müller and Trosch. Ast. 79.

Ophiura, Lamk. Syst. 351, 1801; Fleming, Brit. Anim. 488; Batch, 1779.

Asterophidea, Blainv. Dict. Sc. Nat. lx. 223.

1. OPHIOLEPIS.

Ophiolepis, Müller and Troschel, Ast. 89, 1842; Duben and Koren, Zool. Bidrag. 234, 1847.

Ophiocoma, sp. Forbes, Brit. Starf. 35.

Ophiura, sp. Lamk. Hist. iii. 546; Agassiz, Prod. Ann. Nat. Hist. i. 442, 1838.

Asterias, sp. Müller, Zool. Dan.

1. OPHIOLEPIS ciliata.

Asterias Ophiura, Müller, Zool. Dan. Prod. 235, 2840.

Asterias ciliata, Retz. Diss. 29.

Ophiolepis ciliata, Müller and Troschel, Ast. 91.

Stella lacertosa, Linck, 47. t. 2. fig. 4.

A. lacertosa, Penn. Brit. Zool. iv. 63.

? Ophiura lacertosa, Lamk. Syst. 351.

Ophiura texturata, Lam. Hist. ii. 542, 2nd edit. iii. 221; Blainv. Man. Act. 243; Forbes, Wern. Mem. viii. 125. t. 4. figs. 3, 4; Brit. Starf. 22. fig.

O, bracteata, Flem. Brit. Anim. 488; Johnst. Mag. Nat. Hist. viii. 465. fig. 41.

O. Aurora, Risso, Europ. Merid. v. 273. fig. 29.

O. arenosa, Leach, Zool. Misc. ii. 58.

Asterias cordifera, Chiaje, Mem. t. 20, fig. 12.

a, b, c, d. Dover. Presented by — Tennant, Esq. e, f, g. Dover. Presented by H. Ball, Esq.

h, i, j, k, l. Frith of Forth. Presented by E. Forbes, Esq.

2. OPHIOLEPIS albida.

Ophiura albida, Forbes, Wern. Mem. viii. 125. t. 4. fig. 586; Brit. Starf. 27. fig.

Ophiura texturata, var. minor albida, Lam. Hist. ii. 542, 2nd edit.

iii. 221.

Ophiolepis ciliata minor, Müller and Troschel, Ast. 91.

O. texturata, var. Brit. Collections.

a, b. Frith of Forth. Presented by E. Forbes, Esq.

3. OPHIOLEPIS elegans.

Ophiura elegans, Leach, Zool. Misc. ii. 57, 1815.

Ophiura neglecta, Johnst. Mag. Nat. Hist. viii. 467. fig. 42; Lam. Hist. 2nd edit. iii. 226.

Ophiocoma neglecta, Forbes, Wern. Mem. viii. 126. t. 4. fig. 7; Brit. Starf. 30. fig.

Asterias squamata, Chiaje, Mem. t. 34. fig. 1; not Lamk. Ophiologis squamata, Müller and Troschel, Ast. 92.

Oph. moniliformis, Grube, 18 (1840).

a, b. Shetland. Presented by A. G. Melville, M.D.

4. OPHIOLEPIS punctata.

Ophiocoma punctata, Forbes, Brit. Starf. 37. fig. Ophiolepis punctata, Müller and Troschel, Ast. 92.

a. Anstruther. Presented by E. Forbes, Esq.

5. OPHIOLEPIS filiformis.

Asterias filiformis, Müller, Zool. Dan. 2843; Zool. Dan. t. 122. fig. 1-3.

Ophiura filiformis, Lam. Hist. ii. 546, 2nd edit. ii. 236; Blainv. Man. Act. 244.

Ophiocoma filiformis, Forbes, Brit. Starf. 40. fig.

Ophiolepis filiformis, Müller and Troschel, Ast. 94; Duben and Koren, Zool. Bidrag. 234.

a. Frith of Clyde. Presented by E. Forbes, Esq.

b, c. Frith of Clyde.

d. Frith of Forth. Presented by A. G. Melville, M.D.

2. OPHIOPHOLIS.

Ophiopholis, Müll. and Trosch. Ast. 96.

1. OPHIOPHOLIS aculeata.

Bellis scolopendroides, Linck, t. 40. fig. 71.

Ophiura bellis, Edinb. Phil. Journ. viii. 298; Flem. Brit. Anim.

488, 1828; Johnst. Mag. Nat. Hist. viii. 595. fig. 66.

Ophiocoma bellis, Forbes, Wern. Mem. viii. 226; Brit. St. 53. fig. Asterias aculeata, Retz. Veterak. Akud. iv. 240; Dissert. 32; Müll. Prod. 2841; Zool. Dan. iii. 29. t. 99; Gmel. S. N. 3166.

Ophiura Flemingii, Leach, Zool. Misc. ii. 56, 1815.

0. Ammothæa, Leach, Zool. Misc. ii. 57. t. 79. figs. 1, 2.

Asterias Ophiura, O. Fab. Faun. Gran. 371.

Ophiolepis (Ophiopholis) scolopendrica, Müll. & Trosch, Ast. 96.

a. Isle of Man. Presented by E. Forbes, Esq. b, c, d, e. Shetland and Orkney. W. E. Leach, M.D.

2. OPHIOPHOLIS brachiata.

Asterias brachiata, Montague, Linn. Trans. vii. 84.

Ophiura brachiata, Leach, Zool. Misc. ii. 57; Flem. Brit. Anim. 488: Blainv. Man. Act. 243.

Ophiocoma brachiata, Forbes, Brit. Starf. 45. fig.

Ophiolepis (Ophiopholis) brachiata, Müller and Troschel, Ast. 96. O. filiformis, Templeton, Mag. Nat. Hist.

a, b, c, d. Devonshire, G. Montague, Esq.

3. OPHIOPHOLIS Ballii.

Ophiocoma Ballii, Thompson, Ann. Nat. Hist. v. 99 (1840); Forbes, Brit. Starf. 35. fig.

Ophiolepis Ballii, Duben and Koren, Zool. Bidrag. 234.

Ophiolepis (Ophiopholis) Ballii, Müller and Troschel, Ast. 97. Ophiura squamata, Grube, 17 (1840). Inhab. Ireland.

4. OPHIOPHOLIS Goodsiri.

Ophiocoma Goodsiri, Forbes, Brit. Starf. 57. fig.; Müller and Troschel, Ast. 97.

a. Broken. Anstruther, North Britain. Presented by E. Forbes, Esq.

3. Орнгосома.

Ophiocoma, Müller and Troschel, Ast. 98.

Ophiocoma, sp. Agassiz, Prod. Ann. Nat. Hist. 1, 442; Forbes, Wern. Mem. viii. 127; Brit. Starf. 56; Duben and Koren, 234. Ophiura B, Blainv. Dict. Sc. Nat. lx.

Ophiura, sp. Lamk. Hist. iii. 1816; Flem. Brit. Anim. 1828.

1. OPHIOCOMA nigra.

Stella scolopendroides, Linck.

Stella scolopendroides granulata, Linck, 50. t. 26. f. 43, cop. E. M. t. 124. figs. 2, 3.

Ophiura granulata, Flem. Brit. Anim. 488; Johnst. Mag. Nat. Hist. 1x. 595. fig. 67; Blainv. Man. Act. 243.

Ophiocoma granulata, Forbes, Wern. Mem. viii. 127; Brit. Starf. 50. fig.

Asterias nigra, Müller, Zool. Dan. iii. 20. t. 93. figs. 1-4; Gmel. S. N. 3168.

Ophiocoma nigra, Müller and Troschel, Ast. 100; Duben and Koren, Zool. Bidrag. 234.

Ophiura echinata, Lam. Hist. ii. 543, 2nd edit. iii. 223.

Ophiocoma echinata, Agassiz, Prod. Ann. Nat. Hist. i. 442.

Ast. tricolor, Retz. Diss. Oph. sphærulata, Nilson.

Oph. Nilsonii, Müller and Troschel, Ast. 100.

a, b, c. Devonshire.

d, e. Plymouth Sound. W. E. Leach, M.D.

4. OPHIOTHRIX.

Ophiothrix, Müller and Troschel, Ast. 109; Duben and Koren, Zool. Bidrag. 238, 1840.

Ophiocoma, sp. Forbes, Wern. Trans. viii. 127; Brit. Starf. 60.

1. OPHIOTHRIX fragilis.

Stella echinata, Rondel, Ins. 123.

Rosula scolopendroides, Linek, t. 37. fig. 65. t. 26. fig. 42, cop. E. M. t. 123. figs. 6, 7; Borlase, Cornw. t. 25. figs. 19, 24.

Ophiura vulgaris, Leach, Zool. Misc. ii. 54 (1815).

Ophiura Rosula, Flem. Brit. Anim. 489 (1828); Johnst. Mag. Nat. Hist. ix. 231. fig. 26; Templeton, Mag. Nat. Hist. 1836, 237. fig. 30.

Ophiocoma Rosula, Forbes, Wern. Trans. viii. 127; Brit. Starf. 60. fig.

Ast. fragilis, Ahild. Zool. Dan. iii. 28. t. 98; Gmel. S. N. 3168. Ophinra fragilis, Lank. Hist. ii. 546; Gravenh. Tergestina, 104; Blainv. Man. Act. 244.

Ophiothrix fragilis, Müller and Troschel, Ast. 110; Duben and Koren, Zool. Bidrag. 238.

Asterias pentaphylla, Penn. Brit. Zool.

A. varia, Penn. Brit. Zool.
A. aculeata, Penn. Brit. Zool.

4. pentagona, Chiaje, Mem. iii. 76. t. 34. fig. 15.

A. Cuvieri, Chiaje, Mem. iii. 76. t. 34. fig. 17.

A. hastata, Penn. Brit. Zool.

A. fissa, Penn. Brit. Zool.

A. nigra, Penn. Brit. Zool.

spinulosa, Risso, Eur. Merid. 272. t. 6. fig. 30.
 a, b, c, d. S. Devon. W. E. Leach, M.D.

e. Frith of Forth. W. E. Leach, M.D. f. g, h. Falmouth. W. Cocks, Esq. i, j. Torbay. W. E. Leach, M.D.

2. OPHIOTHRIX minuta.

Stella hirsuta, &c., Linck, 50?.

Asterias minuta, Penn. Brit. Zool. iv. 63. n. 61?.

Ophiocoma minuta, Forbes, Wern. Mem. viii. 127. t. 4. fig. 8; Brit. Starf. 65. fig.

Ophiothrix fragilis, jun., Müller and Troschel, Ast. 110. a. Isle of Man. Presented by E. Forbes, Esq.

5. ASTROPHYTON.

Euryale, Lamk. Ext. du cour, 35, 1812, no character; Agassiz, Prod. Ann. Nat. Hist. i. 443, 1838.

Euryale sp., Lamk. Hist. A. s. Vert. iii. 1816.

Euryale \$\beta\$, Blainv. Dict. Sc. Nat. lx. 227.

Gorgonocephalus, Leach, Zool. Misc. ii. 51, 1815.

Astrophyton, Linck, De Stellis Mar.; Flem. Brit. Anim. 489, 1828; Müller and Troschel, Ast. 121; Forbes, Brit. Starf. 67. Asterias, sp. Linn. Syst. Nat.

Ophiura 3, Lamk. Syst. 350, 1801.

1. ASTROPHYTON arborescens.

Astrophyton scutatum, Linck, t. 19. fig. 48; Flem. Brit. Anim. 489; Forbes, Brit. Starf. 67. fig.; not Agassiz nor Lamk.

Astrophyton Linckii, Müller and Troschel, Ast. 122.

Asterias caput medusæ, Linn. S. N. 1101; Müller, Zool. Dan. Prod. n. 2844; Turton, Brit. Fauna, 149.

Ophiura caput medusæ, Lamk. Syst. 351.

A. arborescens, Penn. Brit. Zool. iv. 67. n. 73. Euryale scutatum, Blaine, Man. Act. 246?.

Inhab. North Sea.

Order III. CRINOIDEA.

Crinoidea, Müller, Agassiz, Prod. Ann. Nat. Hist. i. 443, 1838; Gray, Syn. Brit. Mus. 1842, 118; Forbes, Wern. Mem. viii. Asterenerinea, Blainv. Dict. Sc. Nat. lx. 228, 1830.

Pinnigrada, Forbes, Brit. Starf. 14.

Pinnigradastella, Austen, Ann. & Mag. N. H. x.

Fam. 1. PENTACRINITIDE.

Pentacrinitidæ, Gray, Syn. Brit. Mus. 1842, 119.

1. ANTEDON.

Antedon, Fremenville, Bul. Soc. Phil. ii. 349, Oct. 1811.

Alecto, Leach, Zool. Misc. 61, 1815; not Lamx. 1821; Müller, Bericht Akad. Berlin, 1841, 179.

Comatula, Lank. 1816; Blainv. Dict. Sc. Nat. lx. 229; Flem. B. A. 490; Agassiz, Prod. Ann. N. H. i. 443; Gray, Ann. Phil. xxviii. 392.

Comatule, Lamk, 1812 (no char.).

Decameros, Linck, Stellis, 55.

Asterocoma, Blainv. Diet. Sc. Nat. lx. 229, 1830.

Phytocrinus, Blainv. Diet. Sc. Nat. lx. 236, 1830; Agassiz, Prod. Ann. Nat. Hist. i. 444, junior.

Pentacrinus, J. V. Thompson, Mem.

1. ANTEDON decameros.

Stella decameros rosacea, Linck, 55. t. 37. f. 66, cop. E. M. t.

Stella decameros barbata, Linck, t. 37. f. 65.

Asterias bifida, Penn. Brit. Zool. 65, n. 70. A. decameros, Penn. Brit. Zool. 66, t. 33, f. 71.

A. pectinata, Adams, Linn. Trans. v. 10.

Alecto europæa, Leach, Zool. Misc. ii. 62, 1821; Müll. Bericht Akad. Berl. 1841, 182.

Comatula mediterranea, Lam. H. ii. 535, ed. 2. iii. 210; Sars, Besk. 40. t. 8. f. 19.

C. rosacea, Flem. Brit. Anim. 490; Blainv. Dict. Sc. Nat. lx. 229; Man. Act. 248; Forbes, Wern. Mem. viii. 128; Brit. Starf. 5. figs. 5, 8, 11 & 18.

C. barbata, Flem. Brit. Anim. 490; Blainv. Dict. Sc. Nat. 1x. 229.

C. fimbriata, Müller, Crinoidea, 132. t. 1. Young, attached, Forbes, l. c. fig. 11.

Pentaerinus europæus, Thomp. Mem. Pent. t. 1, 2; Edin. Phil. Journ. xx. 35. t. 2; Flem. Brit. Anim. 490; Buckland, Bridg. Tr. t. 52. fig. 2.

Phytocrinus europæus, Blainv. Dict. Sc. Nat. lx. 236; Man. Act. 255. t. 27. figs. l, 2; Agassiz, Prod. Ann. Nat. Hist. i. 444.

a. In spirits. Adult. British ocean.

Three young, dry, on paper. Cork, J. V. Thompson. Presented by G. Johnston, M.D.

c, d, e. Adult. Plymouth Sound. W. E. Leach, M.D.

f. Adult.

2. GYNAMEDA.

Gynameda, Gray, Proc. Zool. Soc. 1834, 15; Agussiz, Prod. Ann. Nat. Hist. i. 444.

1. GYNAMEDA pulchella.

Gynameda pulchella, Gray, Proc. Zool. Soc. 1834, 15; Agassiz, Prod. Ann. Nat. Hist. i. 444.

a. Kent.

Sect. II. LEIODERMA.

Class III. ACALEPHA.

Radiaires molasses, Lamk. Syst. 352, 1801; Hist. ii. 2nd edit. iii. 1.

Arachnodermata, Blainv. Dict. Sc. Nat. lx.; Man. Act. 266. Zoophytes faux, Blainv. Dict. Sc. Nat. lx.; Man. Act. 110. Acalepha free, Flem. Brit. Anim. 472. Acalepha libres and A. hydrostatique, Cuvier, R. A. iv. 54. 63.

Acalepha libres and A. hydrostatique, Cuvier, R. A. iv. 54. 65. Acalepha, Eschscholtz, System Acalephen, 1829, 4to.

Subclass I. PULMOGRADA.

Pulmograda, Blainv. Man. Act. 271. Discophoræ, Eschsch. Acal. Syst. 39. Medusæ, Linn. S. N. Radiaires Medusaires, Lamk. Hist. 2nd edit. iii. 111.

Order I. PHANEROCARPÆ.

Discophoræ phanerocarpæ, Eschsch. Syst. i. 41. Hooded-eyed Pulmograde Medusæ, Forbes, Rep. Brit. Assoc. 1846, 84.

Fam. 1. RHIZOSTOMIDÆ.

Rhizostomidæ, Eschsch. Syst. Acal. 42.

1. RHIZOSTOMA.

Rhizostoma, Cuvier, Bull. Soc. Philom. n. 33, 69; Eschsch. Acal. Syst. 45; Lamk. Syst. 354 (1801); Peron, Ann. Mus. xiv. 362.

Cepheæ, sp. Lamk. Hist. Ephyra, sp. Peron, l. c. 354.

1. RHIZOSTOMA undulata.

Medusa undulata, Penn. Brit. Zool. iv. 58. Rhizostoma undulata, Flem. Brit. Anim. 502.

R. Cuvieri, Lamk. Syst. 354; Esch. Acal. Syst. 45; Peron, Ann. Mus. xiv. 362; Eysenh. N. Act. Acad. Leop. x. 377. t. 34.

R. Aldrovandi, Forbes, Rep. Brit. Assoc. 1846, 84.

Cephea Rhizostoma and C. Aldrovandi, Lamk. Hist. ii. 517; Borlase, Cornw. 257. t. 25. fig. 15; Reaumur, Hist. Acad. Sci. 1710, 478, t. 11, figs. 27, 28.

1710, 478. t. 11. figs. 27, 28. Medusa palmo, Gmel. S. N. 3155.

M. octopus β, Gmel. S. N. 3155.

Lost its pedicel. Medusa simplex, Penn. Brit. Zool. from Borlase, Cornw. t. 25. figs. 13, 14.

Ephyra simplex, Penn. Ann. Mus. xiv. 354.

Inhab.

2. CASSIOPEA.

Cassiopea, Peron, Ann. Mus. xiv. 357; Lamk. Hist. ii. 512; Esch. Acal. Syst. 42.

1. CASSIOPEA lunulata.

Cassiopea lunulata, Esch. 44; Flem. Brit. Anim. 502; Forbes, Brit. Assoc. Rep. 1846, 84.

Medusa lunulata, Penn. Brit. Zool. iv. 58; Borlase, Cornw. t. 25. figs. 16, 17.

Cassiopea Borlasea, Peron, Ann. Mus. xiv. 357; Lamk. Hist. ii. 511.

M. octopus a, Gmel. S. N.; Moodeer, Abh. Schw. Acad. 1790, 12. s. 159.

Inhab.

Fam. 2. MEDUSIDÆ.

Medusidæ, Esch. Acal. Syst. 58; Gray, Syn. Brit. M. 1842, 134.

1. Pelagia.

Pelagia, Peron, Ann. Mus. xiv. 349. Dianæa, sp. Lamk. Hist. ii. 504.

1. PELAGIA cyanella.

Medusa Pelagia, Löffling, Reise, s. 105; Linn. S. N. 1098.

Dianæa eyanella, Lamk. Hist. ii. 507.

D. denticulata, Lamk. Hist. ii. 507. Pelagia denticulata, Peron, Ann. Mus. xiv. 507.

P. noctiluca, Chamisso in Choris Voy, pittor. i. 3. t. 2.

P. cyanella, Esch. 75. t. 6. fig. 1; Peron; Forbes, Rep. Brit. Assoc. 1846, 84.

Inhab. Cornwall, MacAndrew and E. Forbes.

2. PELAGIA ---

Pelagia —, Ann. Nat. Hist. xix. t. 9, fig. 5. Inhab.

2. CHRYSAORA.

Chrysaora, Peron, Ann. Mus. xiv. 365; Esch. Acal. Syst. 78. Cyanea, sp. Lamk. Hist. ii. 320.

CHRYSAORA hysoscella.

Medusa hysoscella, Linn. S. N. 1097; Gmel. S. N. 3153.

M. fusca, Penn. Brit. Zool. iv. 75.

Chrys. Lesueur, C. aspilonota, C. cyclonota, C. spelhelmigona, C. spilogona, C. pleurophora, and C. macrogena, Peron, Ann. Mus. xiv. 365.

Cyanea punctulata, &c., Lamk. Hist. ii. 520; Borlase, Cornw. 256. t. 25. fig. 7.

M. fusca, Penn.; Borlase, Cornw. 257. t. 25. fig. 11.

M. tuberculata, Penn.

Cyanea fusca and C. tuberculata, Flem. Brit. Anim. 501.

Chrysaora hysoscella, Esch. Acal. Syst. 79. t. 7. fig. 2; Forbes, Rep. Brit. Assoc. 1846, 84. Inhab.

3. CYANEA.

Cyanea, Peron, Ann. Mus. xiv.; Esch. Acal. Syst. 67; Lamk. Hist. ii.

l. CYANEA capillata.

Medusa capillata, Linn. F. Suec. n. 1286; Turton, B. F. 139. Cyanea arctica, C. Baltica, C. borealis and C. Britannica, Lamk. Hist. ii.; Peron, Ann. Mus. xiv.; "Baster. Opusc. ii. 6. t. 3. fig. 1."

Cyanea capillata, Esch. 68; Forbes, Rep. Brit. Assoc. 1846, 84; Flem. Brit. Anim. 501.

Inhab.

2. CYANEA Lamarckii.

Cyanea Lamarckii, Dicquemare, Journ. Phys. 1784, 451. t. 1; Peron, Ann. Mus. xiv. 363; Lamk. Hist. ii. 518; Esch. Acal. Syst. 71. t. 5. fig. 2; Forbes, Rep. Brit. Assoc. 1846, 84. Inhab. North Sea.

4. MEDUSA.

Medusa, Linn. S. N.; Lamk. Syst. 353; Esch. Acal. Syst. 61. Aurelia, Peron, Ann. Mus. xiv. 358; Lamk. Hist. ii. 513. Cyanea, sp. Cuvier, Règ. Anim. iv. 56.

1. MEDUSA aurita.

Medusa aurita, Linn. F. Suec. n. 1287; Westgoth. 172. t. 3. fig. 2; Lamk. Syst. 353; Forbes, Brit. Assoc. Rep. 1846, 84; Müller, Zool. Dan. ii. t. 76, 77.

Aurelia aurita, Lamk. Hist. ii. 513.

Cyanea aurita, Cuv. R. A. iv. 56; Flem. Brit. Anim. 501.

Aur. rosea, Peron.

Inhab.

2. Medusa cruciata.

Medusa cruciata, Baster. Opusc. i. 123, t. 14. figs. 3, 4; Forbes, Rep. Brit. Assoc. 1846, 84; Turton, Fauna, 139. M. aurita part., Esch. Acal. Syst. 61.

Inhab.

3. MEDUSA purpurata.

Medusa purpurata, Moodeer, 167.

M. purpurea, Penn. Brit. Zool. iv. 57; Borl. Cornw. 257. t. 25, figs. 9, 10.

Aurelia lineolata, Peron, l. c. 359, A. radiolata, Lamk. Hist. ii. 511. M. radiolata, Esch. Acal. Syst. 66. Inhab.

4. MEDUSA Surirea.

Aurelia Surirea, Lamk. Hist. ii. 513. A. Suriray, Peron, l. c. 357. Medusa Surirea, Esch. Acal. Syst. 65. Inhab. English Channel, Esch.

5. MEDUSA campanula.

Aurelia campanula, Lamk. Hist. ii. 513; Peron, 358. Medusa campanula, Esch. Acal. Syst. 65. Inhab. English Channel, Esch.

Order II. CRYPTOCARPÆ.

Discophoræ cryptocarpæ, Esch. Acal. Syst. 84 (1829). Naked-eyed Pulmograde Medusæ, Forbes, Rep. Brit. Assoc. 1846, 85.

Fam. 1. WILLSIADE.

Fam. 1. E. Forbes, Rep. Brit. Assoc. 1846, 85.

1. WILLSIA.

Willsin, E. Forbes, Rep. Brit. Assoc. 1846, 85.

1. WILLSIA stellata.

Willsia stellata, Forbes, Rep. Brit. Assoc. 1846, 85. Inhab. British Channel; Scotland; E. Forbes.

Fam. 2. OCEANIDÆ.

Oceanidæ. Esch. Acal. Syst. 94.

1. Turris.

Turris, Lesson; Forbes, Rep. Brit. Assoc. 1846, 85. Eirene, Esch. Acal. Syst. 94.

l. Turris digitale.

Medusa digitale, O. Fab. F. G. 366; Müller, Zool. Dan. Prod. n. 2824.

Melicerta digitale, Peron, 352.

Dianzea digitale, Lamk. 507.

Eirene digitale, Esch. 95.

Turris digitale, Lesson; Forbes, Rep. Brit. Assoc. 1846, 85. Inhab.

2. Turris coccinea.

Cyanea coccinea, Davis.

Turris neglecta, Lesson; Forbes, Rep. Brit. Assoc. 1846, 85. Inhab.

2. SAPHENIA.

Saphenia, Esch. Acal. Syst. 93.

Dianzea, sp. Lamk. Hist. 505; Quoy and Gaim. Ann. Sci. Nat. x. Geryonia, sp. Peron, Ann. Mus. xiv. 329.

Campanella, Quoy and Gaim. Voy. Astrol.?; Blainv. Man. Act. 286.

1. SAPHENIA dinema.

Saphenia dinema, Esch. 93; Forbes, Rep. Brit. Assoc. 1846, 85. Geryonia dinema, Peron. 329.

Dianæa dinema, Lamk. Hist. 505, 2nd edit. iii. 153.

Campanella dinema, Blainv. Man. Act. 286.

Inhab. Devon; Zetland.

3. OCEANIA.

Oceania, Peron, Ann. Mus. xiv. 505; Esch. Acal. Syst. 97. Tiara, Lesson.

Dianæa, sp. Lamk. Hist. iii. 505.

1. OCEANIA octona.

Oceania octona, Forbes, Rep. Brit. Assoc. 1846, 85.

Geryonia octona, Flem. Brit. Anim. 501; Edinb. Phil. Journ. viii. 299.

Inhab.

2. OCEANIA phosphorica.

Oceania phosphorica, Peron, Ann. Mus. 344; Esch. Acal. Syst. 97; Blainv. Man. Act. 282. t. 33. fig. 3.

Dianæa phosphorica, Lamk. Hist. iii. 505, 2nd edit. iii. 155. Inhab. English Channel, Esch.

3. OCEANIA diadema.

Oceania diadema, Peron, Ann. Mus. xiv. 346.

Dianæa diadema, Lamk. Hist. iii. 506.

Inhab. English Channel.

4. ÆQUOREA.

Equorea, Peron, Ann. Mus. xiv. 366; Esch. Acal. Syst. 109; Lamk. Hist. ii. ed. 2. iii. 131; Forbes, Rep. Brit. Assoc. 1846, 85

Foveolia, sp. Peron, Ann. Mus. 340.

1. ÆQUOREA? octocostata.

Æquorea octocostata, Lesson; Forbes, l.c. 85.

Oceania octocostata, Sars, 24. t. 4. fig. 9; Lamk. Hist. 2nd edit. iii. 164.

Melicertum campanulatum, Ehrenb., not Esch.

Thaumantias Milleri, Landsborough.

? Medusa Æquorea, Müll. Prod. n. 233?; Jameson, Wern. Mem. i. 558; Flem. Brit. Anim. 500.

Inhab.

2. ÆQUOREA stauroglypha.

Equorea stauroglypha, Peron, Ann. Mus. 337; Lesueur, Voy. t. 10. figs. 7, 8, 9; Lamk. Hist. 2nd edit. iii. 137.

Inhab. English Channel, Lamk.

3. ÆQUOREA allantophora.

Equoræa allantophora, Peron, Ann. Mus. 338; Lesueur, Voy. t. 12. figs. 5, 9; Esch. Acal. Syst. 111; Blainv. Man. Act. 278; Lamk. Hist. 2nd edit. iii. 138.

Inhab. English Channel, Lamk.

5. CIRCE.

Circe, Mertens; Brandt, Mem. Petersb. 1838, 354, t. 1; Lamk. Hist. 2nd edit. iii. 166; Forbes, Rep. Brit. Assoc. 1846, 85.

1. CIRCE rosea.

Circe rosea, Forbes, Rep. Brit. Assoc. 1846, 85. Inhab. Zetland.

6. THAUMANTIAS.

Thaumantias, Esch. Acal. Syst. 102; Lamk. Hist. 2nd edit. iii. 161; Forbes, Rep. Brit. Assoc. 1846, 85. Geryonia, sp. Flem. Brit. Anim.

1. THAUMANTIAS hemisphærica.

Medusa hemisphærica, Linn. S. N. 1098; Gronov. Act. Helv. iv. 38. t. 4. fig. 7; Müll. Zool. Dan. t. 7; Macartney, Phil. Trans. 1810, 268. t. 15. fig. 5; Lamk. Hist. 2nd edit. ii. 161. Geryonia hemisphærica, Flem. Brit. Anim. 500.

Thaumantias hemisphærica, Esch. Acal. Syst. 103; Lamk. Hist. 2nd edit. iii. 161.

Inhab. British Seas.

2. THAUMANTIAS cymbaloidea.

Medusa cymbaloidea, Slabber, Phys. Belus. S. 53. t. 12. figs. 1, 3; Moodeer, l.c. n. 238; Ency. Method. t. 93. figs. 2, 4.

Dianæa cymbaloidea, Lamk. Hist. ii. 508, 2nd edit. iii. 158.

Medusa campanella, Shaw, Misc. vi. t. 196.

Thaumantias cymbaloidea, Esch. Acal. Syst. 102; Lamk. Hist. 2nd edit. iii. 161; Blainv. Man. Act. 285.

Oceania? cymbaloidea, Peron, Hist. Med. 34.

Inhab. North Sea.

3. THAUMANTIAS pileata.

Thaumantias pileata, E. Forbes, Ann. Nat. Hist. 1841, 85. Inhab.

4. THAUMANTIAS Thompsonii.

Thaumantias Thompsonii, E. Forbes, Ann. Nat. Hist. 1841, 85. Inhab.

5. THAUMANTIAS punctata.

Thaumantias punctata, E. Forbes, Ann. Nat. Hist. 1841, 85. Inhab.

6. THAUMANTIAS sarnica.

Thaumantias sarnica, E. Forbes, Ann. Nat. Hist. 1841, 85. Inhab.

There are twelve other undescribed British species.—E. Forbes.

7. SLABBERIA.

Slabberia, Forbes, Rep. Brit. Assoc. 1846, 85.

l. SLABBERIA halterata.

Slabberia halterata, Forbes, Rep. Brit. Assoc. 1846, 85. Inhab. Coast of Cornwall, E. Forbes.

8. GERYONIA.

Geryonia, Peron, Ann. Mus. xiv.; Esch. Acal. Syst. 86; Forbes, Rep. Brit. Assoc. 1846, 85. Orythia, sp. Peron, Ann. Mus. xiv.

1. GERYONIA appendiculata.

Geryonia appendiculata, Forbes, Rep. Brit. Assoc. 1846, 85. Inhab. British Channel.

2. GERYONIA minima.

Medusa minima, Baster. Opusc. sub. ii. 62. t. 7. fig. 5; Moodeer, l. c. 227.

Orythia minima, Peron, Ann. Mus. 328; Lesueur, Voy. t.3. fig.2; Lamk. Hist. ii. 503, 2nd edit. iii. 146.

Geryonia minima, Esch. Acal. Syst. 87; Blainv. Man. Act. 287. Inhab. British Channel.

9. TIMA.

Tima, Esch. Acal. Syst. 103; Lamk. Hist. ed. 2. iii. 168; E. Forbes, Rep. Brit. Assoc. 1846, 85.

1. TIMA? Bairdii.

Tima? Bairdii, Johnst.; Forbes, Rep. Brit. Assoc. 1846, 85. Inhab. East coast of Scotland.

10. BUGAINVILLIA.

Bugainvillia, Lesson, Ann. Sci. Nat. 1836, t. 5; Forbes, Rep. Brit. Assoc. 1846, 85.

Hippocrene, Mertens MSS.; Brandt, Mem. Petersb. 29; Lamk. Hist. 2nd edit. ii. 151.

1. BUGAINVILLIA Britannica.

Hippocrene Britannica, E. Forbes, Ann. N. H. 1841, 81. t. 1. f. 1. Inhab.

There are two other British species .- E. Forbes.

11. LIZZIA.

Lizzia, E. Forbes, Rep. Brit. Assoc. 1846, 85. Cytalis?, Esch. Acal. Syst. 104?; Sars, Besk. 28; Lamk. Hist. 2nd edit. iii. 165.

1. LIZZIA octopunctata.

Lizzia octopunctata, Forbes, Rep. Brit. Assoc. 1846, 85.

Cytalis? octopunctata, Sars, Besk. ov. Polyp. 28. t. 6. fig. 14; Lamk. Hist. 2nd edit. iii. 166.

Inhab, Zetland Seas.

There are two other undescribed British species in the same seas.

—E. Forbes, I. c. 85.

12. MOODEERIA.

Moodeeria, E. Forbes, Rep. Brit. Assoc. 1846, 85.

1. MOODEERIA ---?

Moodecria —, n. s., Forbes, Rep. Brit. Assoc. 1846, 85. Inhab. Hebrides, E. Forbes.

13. SARSIA.

Sarsia, Lesson; E. Forbes, Rep. Brit. Assoc. 1846, 85.
There are four British species of this genus.—E. Forbes.

14. STEENSTRUPIA.

Steenstrupia, E. Forbes, Rep. Brit. Assoc. 1846, 85.

There are three British species of this genus.—E. Forbes.

15. EULIMENA.

Eulimena, Flem. Edinb. Phil. Journ. viii. 302.

EULIMENA quadrangularis.

Eulimena quadrangularis, Flem. Edinb. Phil. Journ. viii. 302; Brit. Anim. 500. Inhab.

Subclass II. ANOMALA.

Radiaires anomales, Lamk. Hist. ii. 457, 459, ed. 2. iii. 10.

Order III. CILIOGRADÆ.

Ciliogradæ, Gray, Syn. Brit. Mus. 1842, 134. Ciliogrades, Blainv. Dict. Sci. Nat. lx.; Man. Act. 143. Ciliobranches, Blainv. Man. Act. 110. Ctenophora, Esch. Acal. Syst. 21.

Fam. 1. BEROIDÆ.

Beroidæ, Esch. Acal. Syst. 35; Gray, Syn. B. M. 1842, 134. Beroides part., Lamk. Hist. 2nd edit. iii. 48.

1. Beroë.

Beroë, Browne, Jam.; O. Müller, Zool. Dan.; Esch. Acal. Syst. 35.

Beroë, sp. Lamk. Hist. ii. 468, 2nd edit. iii. 49. Idya, Lesson.

1. BEROË cucumis.

Beroë cucumis, O. Fab. F. Græn. 361?; Flem. B. A. 503; Esch. Acal. Syst. 36; Lamk. Hist. ed. 2. iii. 51; Sars, Besk. Pol. 30. B. fulgens, Macartney, Phil. Trans. 1810, 364. t. 15. figs. 1-8. Inhab. North Sea.

2. Beroë ----?

Beroë?, Fleming, Brit. Anim. 504. Patella, Cordiner, Rem. Ruins, n. 11. fig. g, G. Inhab.

3. Beroë borealis.

Idya —, n. s., Fremenville, N. Bull. Soc. Phil. 1809, 239. fig.;
Flem. Mem. Roy. Soc. Edinb. iii. 400. t. 38. figs. 3, 4.

Idya borealis, Lesson; Lamk. Hist. 2nd edit. iii. 51.

Beroë?, Esch. Acal. Syst. 38.

Inhab. North Sea.

Fam. 2. CALLIANIRIDÆ.

Callianiridæ, Esch. Acal. Syst. 21; Gray, Syn. Brit. Mus. 1842; Lamk. Hist. 2nd edit. iii. 32.

1. CYDIPPE.

Cydippe, Esch. Acal. Syst. 25; Lesson, Ann. Sci. Nat. 1836, v. 256; Lank. Hist. A. s. V. 2nd edit. iii. 35.

Eucharis, Peron, Ann. Mus.

Pleurobranchæa, Flem. Phil. Zool. 612. Pleurobranchæa, Flem. Brit. Anim. 1828. Eschscholtzia, Lesson, Ann. Sci. Nat. 1836. Mertensia, Lesson, Ann. Sci. Nat. 1836.

1. CYDIPPE pileus.

Volvax bicaudatus, Linn. S. N. 1325.

Beroë pileus, Müller, Prod. n. 2817; Lamk. Hist. ii. 470; Cuv. R. A. iv. 59; Scoresby, Arct. Reg. i. 549. t. 16. fig. 4.

Medusa pileus, Gmelin, S. N. 3152.

Cydippe pileus, Esch. Acal. Syst. 24; Lamk. Hist. 2nd edit. iii. 36.

Pleurobranchia pileus, Flem. Brit. Anim. 504.

Beroë levigatus, Moodeer; Gronov. Act. Helv. iv. 36. t. 4. figs. 1-6; Baster. Opusc. 124. t. 14. figs. 6, 7.

Inhab, British Channel.

2. CYDIPPE infundibulum.

Volvox Beroë, Linn. S. N. 1324.

Beroë infundibulum, Müller, Prod. n. 2816; Moodeer, N. A. Schw. Akad. 1790, 11.

Medusa infundibulum, Gmel. S. N. 3152.

Cydippe infundibulum, Esch. Acal. 26; Lamk. Hist. 2nd edit. iii. 37.

Beroë ovata, Bast. Opusc. i. 123. t. 14. fig. 5; Lamk. Hist. ii. 469. Beroë ovatus, Flem. Brit. Anim. 502.

Beroë, Flem. Wern. Mem. iii. 401. t. 18. figs. 3, 4; Ellis, Phil. Trans. Iix. 144.

Inhab. Firth of Tay.

3. CYDIPPE pomiformis.

Cydippe pomiformis, Paterson, Trans. Roy. Irish Acad. xix. 91. t. Inhab. Coast of Ireland.

2. BOLINA.

Bolina, Paterson, Trans. Roy. Irish Acad. xix. 91.

l. Bolina hibernica.

Bolina hibernica, Paterson, Trans. Roy. Irish Acad. xix. t. 2. fig. Inhab. Coast of Ireland.

Order IV. PHYSOGRADÆ.

Physogradæ, Gray, Syn. Brit. Mus. 1842. Physogrades and Diphyes, Blainv. D. S. N. lx.; Man. Act. 111.

Fam. 1. DIPHYIDE.

Diphyidæ, Esch. Acal. Syst. 122. Diphyides, Lamk. Hist. 2nd edit. iii. 65. Diphyes, Blainv. Dict. Sci. Nat. lx.; Man. Act. 125.

1. DIPHYES.

Diphes, Cuvier, R. A.; Esch. Acal. Syst. 135. Dagysa, Solander.

1. DIPHYES campanulifera?

Diphyes campanulifera, Esch. Acal. Syst. 137; Lamk. Hist. 2nd edit. iii. 70.

D. Bory, Quoy and Gaim. Ann. Sci. Nat. x. t. 1. figs. 1, 7; Voy. Astrol. 83. t. 4. figs. 1-6; Blainv. Man. Act. 135. t. 5. fig. 1; Thompson, Ann. and Mag. Nat. Hist. 1841, 164.
 Inhab.

Fam. 2. Physophoridæ.

Physogrades, Blainv. Dict. Sci. Nat. lx.; Man. Act. 111. Physophoridæ, Esch. Acal. Syst. 139; Gray, Syn. Brit. Mus. 1842, 134.

Physophorides, Lamk. Hist. 2nd edit. iii. 73.

1. ARETHUSA.

Arethusa, Browne, Jam. 386.
Physalia, Lamk. Syst. 1801, 356; Hist. ii. 2nd edit. iii. 89.
Thalia, Brug. Ency. Méth. t. 89.
Urtica marina, Sloane, Jam. i. 7.
Holothuria, sp. Linn.
Cystisoma, Lesson.
Physophora, Moodeer.

1. ARETHUSA ---?

Physalis, Thompson, Ann. and Mag. Nat. Hist. Inhab. Coast of Ireland, W. Thompson.

Order V. CHONDROGRADÆ.

Chondrogrades, Blainv. Dict. Sci. Nat. lx.; Man. Act. 110. Chondrogradæ, Gray, Syn. Brit. Mus. 1842, 134. Cirrhigrades, Blainv. Dict. Sci. Nat. lx.; Man. Act. 303. Velellidæ, Esch. Acal. Syst. 165. Physophorides part., Lamk. Hist. 2nd edit. iii, 73.

Fam. 1. VELELLIDÆ.

Velellidæ, Esch. Acal. Syst. 165; Gray, Syn. B. M. 1842, 134. Cirrhigrades, Blainv. Man. Act. 303.

1. AGLAURA.

Aglaura, Oken, Lehrb. 125, 1815. Velella, sp. Flem. Brit. Anim. 500. Rataria, Esch. Acal. Syst. 166 (1829).

1. AGLAURA pocillum.

Medusa pocillum, Mont. Linn. Trans. xi. t. 14. fig. 4; Isis, 1817, 483. t. 3. fig. 4.

Rataria pocillum, Esch. Acal. Syst. 168; Lamk. Hist. 2nd edit. iii. 97.

Velella pocillum, Flem. Brit. Anim. 500. Aglaura crista, Oken, Naturg. 135.

Inhab. Devonshire.

2. PHYLLODOCE.

Phyllodoce, Browne, Jam. 387; Moodeer, not Salisbury.
Velella, Lamk. Syst. (1801), 355; Hist. 2nd edit. iii. 99; Peron.
Ann. Nat. Hist.; Esch. Acal. Syst. 168.

1. PHYLLODOCE vulgaris.

Velella vulgaris, Leach, MSS. Brit. Mus. 1819. V. limbosa, Lamk?; Flem. Brit. Anim. 500.

V. aurora, Esch. Acal. Syst. 171.

? Holothuria spirans, Forsk.; Penn, Light. Fl. Scot. i. 66. ? Medusa Velella, Linn. S. N. 1098?; Walker, MSS. 1771.

? Phyllodoce Velella, Moodeer.

? Velella mutica, Lamk. Syst. 355.

V. Scaphidia, Peron.

a, b, c, d, e. In spirits. Barnstable, S. Devon, Rev. 1. Henslow.

Class IV. ZOOPHYTA.

Zoophyta, Gray, Syn. Brit. Mus. 1838, 128; 1842, 134. Anthozoa, Ehrenberg, Corall. Roth. Meer. 31; Johnst. Zooph. 3. Radiated Zoophytes, Johnst. Mag. Zool. and Bot. i. 447. Polypi, Owen, Lectures, 81. Polypes, Jones, Anim. Kingd. 17, 50.

Order I. ZOANTHARIA.

Zoantha, Blainv. Man. 308, 1834.

Zoocorallia polyactinia, Ehrenb. Corall. 31.

Les Zoantaires, Audouin and M. Edwards in Lam. Anim. s. Vert. ii. 106, 1836.

Zoophyta helianthoida, Johnst. in Mag. Zool. & Bot. i. 448, 18 ? Zoontharia, Blainv. Dict. Sci. Nat. 1x. 1830; J. E. Gray in Syn. Brit. Mus. 129.

Anthozoa helianthoida, Johnst. Hist. Brit. Zooph. 2nd edit. p. 180.

Suborder I. GYNOSOMATA.

Fam. 1. ACTINIADE.

Actinia, Linn. Syst. 1088; Soland. Zooph. 1.

Les Actinies, Cuv. Règ. Anim. iii. 291.

Actiniadæ, J. E. Gray in Syn. Brit. Mus. 134; Johnston, Hist. Brit. Zooph. p. 203, 2nd edit.

Zoanthaires mous ou Actiniens, Blainv. Dict. Sci. Nat. lx. 1830, 285; Man. Act. 1834.

Actinina, Ehrenberg, Corall. des Roth. Meer. p. 31; Johnston, Hist. Brit. Zooph. p. 202, 2nd edit.

1. CAPNEA.

Capnea, Johnst. Brit. Zooph. 2nd edit. p. 203. Kapnea, E. Forbes, Ann. Nat. Hist. 1841, 81.

1. CAPNEA sanguinea.

Kapnea sanguinea, Forbes in Ann. and Mag. Nat. Hist. vii. 82. pl. 1. fig. 1. a, b, c, d; Reports Ray Soc. 379.

Capnea sanguinea, Johnston, Hist. Brit. Zooph. 2nd edit. p. 203.

lnhab. Isle of Man.

2. CORYNACTIS.

Corynactis, Allman, Ann. Nat. Hist. xvii. 417.

1. CORYNACTIS viridis.

Corynactis viridis, Allman in Ann. and Mag. Nat. Hist. xvii. 417. pl. 11; Johnston, Hist. Brit. Zooph. 2nd edit. p. 205. t. 35. figs. 10, 11.

Actinia Iris, Müller, Zool. Dan. iii. 3. t. 82. figs. 5, 6?

Inhah, Cork.

2. Corynactis Allmani.

Corynactis Allmani, Thompson; Johnst. Brit. Zooph. 2nd edit. 474. fig. 85.

Inhab. Belfast Bay.

3. ACTINIA.

Actinia, Linn. Priapus, Linn. 10th edit.; Forsk. Zoanthes, sp. Cuv. Tabl. Elem. 1797, 653.

1. ACTINIA mesembryanthemum.

La plus petite des Orties de mer, Rondel. Poiss. 380 (quoad fig.). Ortie de mer, Reaumur in Mém. de l'Acad. Roy. des Sciences, 1710, pl. 10. fig. 22.

Priapus equinus, Linn. Syst. Nat. 10th edit. 656.

Hydra disciflora, Gærtner, Phil. Trans. lii. 83. pl. 1. fig. 5;

Phil. Trans. abridg. xi. 529.

Actinia equina, Linn. Syst. 1088; Dicquemare in Phil. Trans. lxiii. 364. pl. 16. figs. 1-7; Müller, Zool. Dan. Prod. 231; Flem. Brit. Anim. 497; Cuv. Reg. Anim. iii. 292; Johnston in Trans. Newc. Soc. ii. 243; Dalyell, Edinb. New Phil. Journ. xvii. 411, Proc. Brit. Assoc. 1834, 599; Templeton, Mag. Nat. Hist. ix. 303.

Act. mesembryanthemum, Ellis and Soland. Zooph. 4; Encycl. Meth. Vers, pl. 73. fig. 3; Turt. Brit. Faun. 131; Rapp. Polyp. 52. t. 2. fig. 1; Johnston, Mag. Nat. Hist. viii. 81. fig. 12; Grube, Actin. 10; Couch, Zooph. Cornw. 31; Corn. Faun. iii. 74. pl. 14. fig. 1; Hassall, Ann. and Mag. Nat. Hist. vii. 285; Johnston, Hist. Brit. Zooph. 2nd edit. p. 211. fig. 45, t. 36, figs. 1-3.

Act. hemisphærica, Penn. Brit. Zool. iv. 104; Berk. Syn. i. 186;

Hogg's Stock. 30.

Act. rufa, Penn. Brit. Zool. iv. 105; Jameson, Wern. Mem. i. 558; Stew. Elem. i. 393; Roget, Bridgw. Treat. i. 198. figs. 86, 87.

Act. corallina, Risso, l'Europ. Mérid. v. 285.

Common Actinia, Buckland, Bridgw. Treat. ii. 89. pl. 54. fig. 4. Small red Sea Nettle, Wallis, Hist. of Northumb. i. Hydra mesembryanthemum, Stew. Elem. ii. 451. Entacmæa mesembryanthemum, Ehrenb. Corall. R. M. 36?? Inhab. Coast of England.

2. ACTINIA margaritifera.

Actinia margaritifera, Templeton, Mag. Nat. Hist. ix. 304. fig. 50; Johnston, Hist. Brit. Zooph. 2nd edit. p. 213. fig. 46. Inhab. Copeland Island.

3. ACTINIA Chiococca.

Actinia Chiococca, Johnston, Hist. Brit. Zooph. 2nd edit. p. 214. t. 36. figs. 4-6. Inhab. Cornwall.

4. ACTINIA chrysosplenium.

Actinia chrysosplenium, Johnston, Hist. Brit. Zooph. 2nd edit. p. 215. t. 37. figs. 1-3. Inhab. St. Ives.

5. ACTINIA coccinea.

Actinia coccinea, Müll. Zool. Dan. Prod. 231. no. 2792; Zool. Dan. ii. 30. t. 63. figs. 1-3; cop. Encyclop. Méthod. Vers, pl. 72. figs. 1-3; Turt. Gmel. iv. 101; Bosc, Vers, ii. 255; Lam. Anim. s. Vert. iii. 68, 2nd edit. iii. 407; Johnston, Hist. Brit. Zooph. 2nd edit. p. 215.

A. crassicornis jun., Johnston, Brit. Zooph. 1st edit.

Inhab. Coast of Ireland.

6. ACTINIA viduata.

Actinia viduata, Müll. Zool. Dan. Prod. 231. no. 2799; Zool. Dan. ii. 31. pl. 63. figs. 6-8; cop. Encyclop. Méthod. t. 72. figs. 4, 5; Turt. Gmel. iv. 101; Lam. Anim. s. Vert. iii. 68, 2nd edit. iii. 407; Bosc, Vers, ii. 256; W. Thompson, Ann. & Mag. N. Hist. vii. 481; Johnston, Hist. Brit. Zooph. 2nd edit. p. 215.

Isacmæa viduata, *Ehrenb. Corall.* 34. Inhab. Ireland.

7. ACTINIA Troglodytes.

Actinia viduata, Johnston, Mag. Nat. Hist. viii. 82. fig. 13; E. Forbes in Ann. Nat. Hist. iii. 48.

Act. mesembryanthemum var. β, Johnst. Brit. Zooph. 211.
Act. viduata, Couch, Zooph. Cornw. 31; Corn. Faun. iii. 75.
Act. Troglodytes, Johnst. Hist. Brit. Zooph. 2nd edit. p. 216. f. 47.
Inhab. Berwick Bay.

8. ACTINIA alba.

Actinia alba, Johnston, Hist. Brit. Zooph. 2nd edit. p. 217. pl. 37. figs. 4-7.

Inhab. Cornwall.

9. ACTINIA anguicoma.

Actinia anguicoma, Price, MSS.; Johnst. Hist. Brit. Zooph.
2nd edit. p. 219. fig. 48, t. 37, figs. 8, 9.
Inhab. Bangor.

10. ACTINIA intestinalis.

Actinia intestinalis, Fabr. Faun. Grænl. 350. no. 342. pl. 1. fig. 11; Flem. Brit. Anim. 498; Johnston, Hist. Brit. Zooph. 2nd edit. p. 219. fig. 49.

Inhab. Zetland.

11. ACTINIA chrysanthellum.

Actinia chrysanthellum, Johnst. Hist. Br. Zooph. 2nd edit. p.221. t. 37. figs. 10-15. Inhab. Cornwall.

12. ACTINIA biserialis.

Actinia biscrialis, Forbes, Ann. N. H. v. 182. pl. 3; Johnston, Hist. Brit. Zooph. 2nd edit. p. 221, t. 38. fig. 1.
Inhab. Guerosev.

13. ACTINIA vermicularis.

Actinia vermicularis, Forbes, MSS.; Johnst. Hist. Brit. Zooph. 2nd edit. p. 222. t. 38. figs. 2-5.

Inhab. Zetland.

ACTINIA cylindrica.
 Actinia cylindrica, Reid, Ann. N. H. 1848, 34. t. 6. figs. 21, 22.
 Inhab. St. Andrew's Bay.

4. CEREUS.

Cereus, Oken, Lehrb. 1815.

Anthea, Johnston, Brit. Zooph. 1st edit. 1838.

Anemonia, Risso, Eur. Mérid. 1826.

Actinocereus, Blainv. Dict. Sci. Nat. lx. 1830.

1. CEREUS sulcata.

Urtica cincrea, Rondel. Poiss. 381.

Hydra tentaeulis, &c., Gærtner, Phil. Trans. lii. 78. t. 1. fig. 1; Phil. Trans. abridg. xi. 526.

Actinia Cereus, Ellis and Soland. Zooph. 2; Turt. Gmel. iv. 103; Turt. Brit. Faun. 131; Rapp, Polyp. 56. t. 2. fig. 3; Grube, Actin. 11. Act. sulcata, Penn. Brit. Zool. iv. 102; Berk. Syn. i. 186; Stew. Elem. i. 394; Flem. Brit. Anim. 498; Lam. Anim. s. Vert. iii. 69; Encyclop. Méthod. Vers, pl. 73. fig. 12; Bosc, Vers, ii. 257.

Actinocereus sulcatus, Blainv. Dict. Sci. Nat. 1x. 194 (1830).

Hydra Cereus, Gmelin, S. N. 3867; Stew. Elem. ii. 451.

Anthea Cereus, Johnst. Brit. Zooph. 221; W. Thompson, Ann. & Mag. Nat. Hist. vii. 481; Hassall, ibid. vii. 286; Couch, Zooph. Cornw. 34; Corn. Faun. iii. 81. pl. 14. fig. 2; Johnst. Hist. Brit. Zooph. 2nd edit. p. 240. t. 44.

lahab. Cornwall.

2. CEREUS edulis.

Anemonia edulis, Risso, l'Europ. Mérid. v. 289. Actinia Tuediæ, Johnst. Mag. Nat. Hist. v. 163. fig. 58, and in Trans. Newc. Soc. ii. 246.

Anthea Tuediæ, Johnst. Brit. Zooph. 221; Landsborough in Scot. Christ. Herald for April 1840, p. 243; Johnst. Hist. Brit. Zooph. 2nd edit. p. 242. fig. 53.

Inhab. Berwickshire.

5. CRIBRINA.

Cribrina, Ehrenb. Roth. Meer. 40, 1834. Actinocereus, sp. Blainv. D. S. N. lx. 193, 1830. Zoanthes, sp. Cuvier, Tab. Elem. 653, 1797. Actinoloba, sp. Blainv. D. S. N. lx. 288, 1830.

I. CRIBRINA gemmacea.

Ortie de mer, Reaumur in Mém. de l'Acad. Roy. des Sci. 1710,

pl. 10. figs. 21, 23, 26.

Hydra disciflora, Gærtner, Phil. Trans. lii. 82. t. 1. fig. 4; cop. Encyclop. Méthod. Vers, pl. 70. fig. 4; Phil. Trans. abridg. xi. 529.

Hydra gemmacea, Stew. Elem. ii. 451.

Actinia gemmacea, Ellis and Solund. Zooph. 3; Turt. Gmël. iv. 104; Turt. Brit. Faun. 131; Jameson in Wern. Mem. i. 558; Johnst. Hist. Brit. Zooph. 2nd edit. p. 223. t. 37. figs. 6-9.

Act. verrucosa, Penn. Brit. Zool. iv. 103; Berk. Syn. i. 186; Lam. Anim. s. Vert. iii. 70; Stark, Elem. ii. 412; Rapp's Polyp. 50.

Act. glandulosa, Bosc, Vers, ii. 259; Rapp's Polyp. 52. Actinocereus sessilis, Blainv. Dict. S. N. 1830, lx. 193.

Cribrina verrucosa, Ehrenb. Corall. 40.

Inhab. Cornwall.

2. CRIBRINA monile.

Actinia monile, Templeton, Loud. May. Nat. Hist. ix. 303, fig. 49; Johnst. Hist. Brit. Zooph. 2nd edit. p. 224, fig. 51. Inhab. Belfast.

3. CRIBRINA coriacea.

L'Actinie coriace, Cuv. Règ. Anim. iii. 291.

Actinia coriacea, Rapp, Polyp. 51. t. 1. figs. 3, 4; Teale, Trans. Leeds Soc. i, 91. pl. 9, 10, 11; Johnst. Hist. Brit. Zooph. 2nd edit. p. 224. t. 39. figs. 1, 2.

Act. senilis, Flem. Brit. Anim. 498.

Act. gemmacea, var. β, Johnst. Brit. Zooph, 213. pl. 27; Couch, Corn. Faun. iii. 76.

Cribrina coriacea, Ehrenb. Corall. 40.

Act. digitata, Müll. Zool. Dan. iv. 16, t. 133?

Act. monile, Cocks.

Act. troglodytes, Couch.

Act. bellis, Couch, Corn. Faun. iii. 76.

Inhab. Cornwall.

4. CRIBRINA crassicornis.

L'Ortie rouge, Rondel. Poiss. i. 381-382.

Priapus sive Actinia proboscidibus crassis rotundis, Bast. Opusc.

subsec. i. lib. iii. 143, t. 13, fig. 1.

Act. felina, Linn. Syst. 1088; Barbut, Gen. Verm. 53. t. 5. fig. 6. Act. senilis, Dicquemare, Phil. Trans. Ixiii. 367. t. 16. fig. 10, and t. 17. figs. 11, 12; Johnst. Trans. Newc. Soc. ii. 245 (pelagic varieties); Templeton, Mag. Nat. Hist. ix. 303.

Actinia crassicornis, Müll. Zool. Dan. Prod. 231; Adams, Linn. Trans. iii. 252; Jameson, Wern. Mem. i. 558; Stew. Elem. i. 393; Lam. Anim. s. Vert. iii. 67, 2nd edit. iii. 407; Johnst.

Hist. Brit. Zooph, 2nd edit. p. 226. t. 40. Act. holsatica, Rathke, Müll. Zool. Dan. iv. 23. t. 139.

Act. equina, Sowerby, Brit. Misc. 7. pl. 4. 7 Act. bimaculata, Grube, Actin. 4. fig. 4.

Inhab. Coast of England.

5. CRIBRINA parasitica.

La quatrième espèce d'Ortie, Rondel. Poiss. i. 382. fig.

Actinia effecta, Rapp's Polyp. 54. t. 2. fig. 2.

Act. parasitica, Couch, Zooph. Cornw. 34; Corn. Faun. iii. 80. pl. 15. figs. 1, 2; Johnst. Hist. Brit. Zooph. 2nd edit. p. 228. t. 41.

Inhab, Cornwall.

6. CRIBRINA bellis.

Hydra calyciflora, Gærtn. Phil. Trans. lii. 79. t. 1. fig. 2; Phil.

Trans. abridg. xi. 527.

Actinia bellis, Ellis and Soland. Zooph. 2; Rapp's Polyp. 50. t. 1. figs. 1, 2; Turt. Gmel. iv. 103; Turt. Brit. Faun. 131; Hassall, Ann. & Mag. Nat. Hist. vii. 285; Johnst. Hist. Brit. Zooph. 2nd edit. p. 228. fig. 52. t. 41.

Actinia Templetonii, Couch, Corn. Faun. iii. 80.

Actinia pedunculata, Penn. Brit. Zool. iv. 102; Berk. Syn. i. 186; Lam. Anim. s. Vert. iii. 70, 2nd edit. iii. 411; Bosc, Vers, ii. 258; Stark, Elem. ii. 412; Flem. Brit. Anim. 498; Templeton, Mag. Nat. Hist. ix. 303.

Actinocereus pedunculata, Blaine. Dict. Sc. Nat. 1830, lx. 194.

Hydra bellis, Stew. Elem. ii. 451.

Cribrina bellis, Ehrenb. Corall. 41; Edw. Lam. Anim. s. Vert. 2nd edit. iii. 425; Grube, Actin. 12.

Act. Templetonii, Couch, Corn. Faun. iii. 76.

Inhab. Cornwall.

7. CRIBRINA Dianthus.

Urtica soluta caryophyllum referens, Planc. Conch. 43. t. 4. fig. 6. Prispus sive Actinia proboscidibus tenuibus brevibus, Bast. Opusc. subsec. i. lib. iii. 143. t. 13. figs. 2-4 (bene).

Actinia senilis, Linn. Syst. 1089. Actinia judaica, Linn. Syst. 1088.

Actinia Dianthus, Ellis in Phil. Trans. lvii. 436. t. 19. fig. 8, cop. in Encyclop. Méthod. Vers., pl. 71. fig. 5; Ellis & Soland. Zooph. 7; Shaw, Nat. Misc. xiii. pl. 539 (copied from Ellis and coloured from the description!); Turt. Grnel. iv. 104; Turt. Brit. Faun. 131; Stew. Elem. i. 394; Flem. Brit. Anim. 498; Johnst. Hist. Brit. Zooph. 2nd edit. p. 233. t. 43.

Fourth species of Anemony, Dicquemare, Phil. Trans. abridg.

xiii. 638. pl. 12. fig. 9.

Actinia pentapetala, Penn. Brit. Zool. iv. 104; Berk. Syn. i. 187; Lam. Anim. s. Vert. iii. 71, 2nd edit. iii. 412; Bosc, Vers, ii. 259.

Le Zoanthe à cinq pétales, Cuvier, Tab. Elem. 653.

Actinoloba Dianthus, Blainv. Dict. Sc. Nat. Ix. (1830), 288;

Man. Actinol. 322.

Actinia plumosa, Müll. Zool. Dan. Prod. 230. no. 2791; Zool. Dan. iii. 12. t. 88. figs. 1, 2 (drawn when the animal has been in a very relaxed and half-expanded condition), and fig. 4; Turt. Gmel. iv. 100; Turt. Brit. Faun. 130; Stew. Elem. i. 394; Lam. Anim. s. Vert. iii. 68, 2nd edit. iii. 407; Bosc, Vers, ii. 256; Stark, Elem. ii. 412; Cuv. Règ. Anim. iii. 291; Rapp's

Polyp. 55. t. 3. fig. 1 (good); Johnston, Trans. Newc. Soc. ii. 246; Micros. Journ. ii. 147.

Metridium plumosa, Blainv. Diet. Sc. Nat. 1x. 287; Actinol. 321. Actinia senilis, Barb. Gen. Verm. 53. t. 5. fig. 5; Adams, Linn. Trans. v. 9; Lam. Anim. s. Vert. iii. 68; Stark, Elem. ii. 412.

Hydra Dianthus, Stew. Elem. ii. 451.

Act. Dianthus, W. Thompson, Ann. Nat. Hist. v. 251. Inhab.

Doubtful Species.

- Actinia truncata, Jameson, Wern. Mem. i. 558; Penn. Brit. Zool. iv. 106; Turt. Brit. Faun. 131.
 Inhab.
- Actinia sulcata, Templeton, Loud. Mag. N. H. ix. 303.
 A. efforta, jun., Templeton.
 Inhab.
- Actinia caryophyllus, Stew. Elem. i. 394; Penn. B. Z. iv. 106; Martin, Marine Worms.

A. Dianthus?, Johnst. Brit. Zooph. 234.

Inhab.

Actinia anemonoides, Turt. Syst. Nat. iv. 101.
 Act. Anemone, Penn. B. Z. iv. 106; not Ellis; Shaw, Nat. Misc. t. 26, 27.
 Inhab.

6. ADAMSIA.

Adamsia, E. Forbes, Ann. Nat. Hist. v. 183. Cribrina, sp. Ehrenb. Corall. 41.

1. ADAMSIA palliata.

Medusa palliata, Bohad. Anim. Mar. 135. t. 11. fig. 1.

Actinia maculata, Adams, Linn. Trans. v. 8; Coldstream, Edinb. New Phil. Journ. ix. 236, t. 4, figs. 6, 7; and in Edinb. Journ. Nat. & Geogr. Sc. iii. 49; Forbes, Ann. Nat. Hist. iii. 48; W. Thompson, ibid. v. 251; Hassall, ibid. vii. 286.

Act. carciniopados, Otto in Nov. Act. Acad. C. L. C. Nat. Cur. xi. 288. pl. 40; D. Chiaje, Anim. s. Vert. Nap. ii. 242; Rapp,

Polyp. 58; Grube, Actin. 13.

Cribrina palliata, Ehrenb. Corall. 41; Lam. Anim. s. Vert. 2nd edit. iii. 426.

Actinia picta, Risso, l'Europ. Mérid. v. 286.

Actinia effecta, Turt. Gmel. iv. 101; Turt. Brit. Faun. 131.
Parasite Actinia, Landsborough in Scot. Christ. Herald, ii. 333.

Adamsia maculata, Forbes in Ann. Nat. Hist. v. 183. Adamsia palliata, Johnst. Brit. Zooph. 2nd edit. 207. fig. 44. t. 42. figs. 1, 2. Inhab. Milford Haven.

7. Iluanthos.

Iluanthos, E. Forbes, Ann. Nat. Hist. v. 184.

1. ILUANTHOS scoticus.

Iluanthos scoticus, Forbes, Ann. Nat. Hist. v. 184. pl. 3; W. Thompson, Ann. Nat. Hist. xv. 322; Johnst. Hist. Brit. Zooph. 2nd edit. p. 243. t. 45. figs. 1, 2.
Inhab. Loch Ryan.

Fam. 2. LUCERNARIADE.

Lucernariadæ, M. Edw. Cuvier, R. A. Zooph. t. 63; Johnst. Brit.
Zooph. 2nd edit. 244.
Actiniadæ pars, Gray, Syn. Brit. Mus.

1. LUCERNARIA.

Lucernaria, Müller, Zool. Dan. Prod. 232; Ehrenb. Corall. 43; Johnst. Brit. Zooph. ed. 2. 244.

1. LUCERNARIA fascicularis.

Lucernaria fascicularis, Fleming in Wern. Mem. ii. 248. pl. 18. figs. 1, 2; Flem. Brit. Anim. 499; Templeton in Mag. Nat. Hist. ix. 304; Lamouroux, in Mém. du Mus. ii. 470; Ehrenb. Corall. 43; Johnst. Hist. Brit. Zooph. 2nd edit. p. 244. t. 45. figs. 3-7, and 252.

L. quadricornis, Müller, Zool. Dan. Prod. 227; Zool. Dan. i. 51. t. 39; Johnst. Brit. Zooph. 252, 476.
Inhab. Zetland.

2. LUCERNARIA auricula.

Holothuria lagenam referens tentaculis octonis fasciculatis, Müll. Zool. Dan. Prod. 232. no. 2812.

Lucernaria auricula, Fab. Faun. Grænl. 341; Montagu in Linn. Trans. ix. 113. pl. 7. fig. 5; Flem. Brit. Anim. 499; Johnst. in Mag. Nat. Hist. v. 44. fig. 29, and in Trans. Newc. Soc. ii. 248; Templeton in Mag. Nat. Hist. ix. 304; Sars, Söëdyr. Naturh. 34. t. 4. figs. 1-13; Couch, Zooph. Cornw. 35; Corn. Faun. iii. 83. pl. 16. figs. 1-3; Johnst. Hist. Brit. Zooph. 2nd edit. p. 246. figs. 54, 55; Edw. Cuv. R. A. Zooph. t. 63. L. octoradiata, Lamk. Anim. s. Vert. ii. 474.

L. auricula, Lamour. Mém. du Mus. ii. 471.

a. In spirits.

3. LUCERNARIA campanulata.

Lucernaria campanulata, Lamz. in Mém. du Mus. ii. 472. pl. 16. figs. 1-7; Johnst. Hist. Brit. Zooph. 2nd edit. p. 248.

L. Convolvulus, Johnst. in Mag. Nat. Hist. viii. 59. fig. 3.

Lucernaire auricule, Blaine. Man. Act. pl. 50. fig. 4.
a. In spirits. Presented by G. Johnston, M.D.

4. LUCERNARIA cyathiformis.

Lucernaria cyathiformis, Sars, Faun. Norv. i. 26. t. 3. figs. 8-13; Johnst. Brit. Zooph. 2nd edit. 475. fig. 86.
Inhab. Arran.

Suborder II. CHONDROPHORA.

Fam. 1. ZOANTHIDE.

Zoanthina, Ehrenb. Corall. des roth. Meeres, p. 45; Johnst. Hist. Brit. Zooph. p. 201.

Les Zoanthes, Cuv. Règ. Anim. iii. 293.

Les Zonnthaires coriacés, Blainv. Dict. Sc. Nat. 1830, 294; Act. 1834, 328.

Zoanthidæ, J. E. Gray in Syn. Brit. Mus. 129, 1840.

1. ZOANTHUS.

Zoanthus, Cuvier, Trait. Elem.; Règ. Anim. 1817; Ehrenb. Corall.

Zoantha, Lamk. Anim. s. Vert.; Schweiger.

1. ZOANTHUS Couchii.

Zoanthus Couchii, Couch, Corn. Faun. iii. 73. pl. 15. fig. 3; Johnst. Hist. Brit. Zooph. 2nd edit. p. 202. t. 35. fig. 9; Ann. Nat. Hist. xiv. 415.

a, b, c. Cornwall, R. I. Couch, Esq. Presented by G. Johnston, M.D.

The dry specimen exactly resembles Sarcodictyon catenata.

Suborder III. CORALLIPHORA.

Madreporea, Blainv. Dict. Sc. Nat. 1830, 297.
Phytocorallia, Polyactinia and P. dodeactinia, Ehrenb. Corall.
Madreporina, Wiegm. & Ruthe, Handb. Zool. 592, 1832.
Fungina, Ehrenb. Corall.; Wiegm. & Ruthe, 592.

Fam. 1. POCILLOPORIDÆ.

Milleporina, Ehrenb. Corall. des rath. Meeres, p. 122; Johnst.
 Hist. Brit. Zooph. 2nd edit. p. 194.
 Madrepores, Blainv. Dict. Sc. Nat. 1830, 347.

Pocilloporidæ, Gray, Syn. Brit. Mus. 135.

1. Pocillopora.

Pocillopora, Lamk.; Ehrenb. Corall. Madrepora, sp. Müller; Linn.

1. POCILLOPORA? interstincta.

Madrepora interstincta, Müll. Zool. Dan. Prod. 252.

Pocillopora interstincta, Flem. Brit. Anim. 511; Johnst. Hist. Brit. Zooph. 2nd edit. p. 194, 251; New Edinb. Phil. Journ. 1846, 203.

Inhab. Zetland.

Fam. 2. OCELLINIDÆ.

Ocellina, Ehrenb. Corall. des roth. Meeres, p. 75; Johnst. Hist. Brit. Zooph. 2nd edit. p. 195.

Madrephyllia, Blainv. Dict. Sc. Nat. 1830, 301.

Madreporidæ, Gray, Syn. Brit. Mus.; Ann. Nat. Hist.

1. TURBINOLIA.

Turbinolia, Lamk. Hist. A. s. V.; Ehrenb. Corall.

1. TURBINOLIA Millesiana.

Turbinolia Millesiana, Defrance, Dict. Sc. Nat. lvi. 92; Blainv.
Dict. Sc. Nat. lx. 303; S. V. Wood in Ann. & Mag. N. H.
xiii. 12; Morris, Cat. 46; Johnst. Hist. Brit. Zooph. 2nd edit.
p. 196. t. 35. figs. 1-3.

Turbinolia Millesiana, Lam. Anim. s. Vert. 2nd edit. ii. 364;

Forbes, Rep. Brit. Assoc. 1845, 66.

"Turbinolia mixta, Defrance, MSS.; Michelin, Polyp. Fossil. France, t. 43. fig. 3," E. Forbes.

Turbinolia, Taylor, Loud. Mag. Nat. Hist. iii. 272.

a. North Sea. Presented by J. Alder, Esq.

2. Oculina.

Oculina, sp. Lamk. Hist. A. s. V.; Ehrenb. Corall. Madrepora, sp. Solander.

1. Oculina prolifera.

Madrepora prolifera, Seba, Mus. iii. t. 116. fig. 3; Pallas, Elench. 307; Linn. Syst. Nat. 1281; Müll. Zool. Dan. Prod. 252; Ellis and Solander, Zooph. 153. t. 32. fig. 2; Esper, Mad. i. t. 11.

Oculina prolifera, Lamk. H. A. s. V. ii. 286, 2nd edit. ii. 456; Blainv. Act. 380; Ehrenb. Corall. R. M. 80; Johnst. Brit. Zooph. 2nd edit. 195, 251 note; New Edinb. Phil. Journ. 1846, 203; King, Ann. & Mag. Nat. Hist. 1847, 279.

Inhab. Shetland, Atkinson. Mus. Newcastle.

3. CARYOPHYLLIA.

Caryophyllia, Lamk. Hist. A. s. V. Caryophylliaa, Blainv. 1830.

Cyathina, Ehrenb.

Astreæ, sp. Browne, 17 ?

Turbinolia, sp. Flem. 1828; Blainv. 1830.

1. CARYOPHYLLIA Smithii.

Caryophyllia cyathus, Fleming in Wern. Mem. ii. 249, and in Edinb. New Phil. Journ. viii. 70; Broderip in ibid. viii. 312;

Flem. Brit. Anim. 508; not Lamk.

Car. Smithii, Stokes and Broderip in Zool. Journ. iii. 486. pl. 13. figs. 1-6, and in Bull. des Sc. Nat. xvii. 157; Buckland, Bridgw. Treat. ii. 90. pl. 54. figs. 9-11; Harvey in Proc. Zool. Soc. 1834, part ii. 28, and in Mag. Nat. Hist. n. s. i. 474. fig. 55; Thompson in Ann. Nat. Hist. v. 251; Portlock's Lond. 334; Couch, Zooph. Cornw. 29; Corn. Faun. iii. 72. pl. 12. fig. 3; Johnst. Hist. Brit. Zooph. 2nd edit. p. 198. t. 35. figs. 4-8.

Car. sessilis, Bellamy's S. Devon, 267 & 330. pl. 18.

Car. pygmea, Risso, P Eur. Mérid. v. 352?; Blainv. Dict. Sc. Nat. lx. 310.

a, b, c, d. Cornwall. Presented by G. Johnston, M.D.

2. CARYOPHYLLIA borealis.

Fungia turbinata, Fleming in Wern. Mem. ii. 25.

Turbinolia borealis, Flem. Brit. Anim. 509; Blaine. Diet. S. N. 1830, Ix. 307; Johnst. Brit. Zooph. 2nd edit. 195. f. 42. 473. Caryophyllia Smithii, var. Forbes; Johnst. B. Z. 2nd edit. 473.

a. Oban, J. Alder, Esq. Presented by G. Johnston, M.D.

Doubtful British Species.

 CARVOPHYLLIA ramea, Lamk. Syn. 370; Johnst. B. Z. 2nd edit. 201, 473.

Madrepora ramea, Linn. Sol. Zooph. t. 38.

Lithodendron ramea, Schweig.

Dendrophyllia ramea, Blaine.

Oculina ramen, Ehrenb.

Inhab. Mediterranean. Cornish coast, Murray, Ency. Geog. 1840, 343.

4. CARYOPHYLLIA musicalis, Lamk. Hist. ii.

Madrepora musicalis, Linn. Syst. 1278; Berk. Syn. i. 211; Turt. S. N. iv. 625; Brit. Faun. 204.

Mad. organum, Pallas, Zooph. 317.

Anthophyllum musicalis, Ehrenb. Sarcinula musicalis, Blainv. Inhab. Irish coast.

MADREPORA truncata.

Inhab. "British," Stewart, Elem. ii. 426.

MADREPORA lichenoides.

Inhab. "British," Turt. Brit. Faun. 204.

Order II. ZOOPHYTARIA.

Zoophytaria, Blainv. Dict. Sci. Nat. lx. 1830; Man. 496 (1834); Gray in Syn. Brit. Mus. 131 (1842).

Zoocorallia octactinia, Ehrenb. Corall. des roth. Meer. 53 (1834).
Les Aleyoniens, Audouin and M. Edwards in Lam. An. s. Vert.
iii. 105 (1836).

Zoophyta asteroida, Johnst. in Mag. Zool. and Bot. i. 447 (1836). Anthozoa asteroida, Johnst. Hist. B. Z. 2nd edit. p. 138 (1847).

Suborder I. RADICATA.

Polipiers corticifères part., Lam. Extr. du Cour. 1812, 1816. Polipes tubifères, Lam. Extr. du Cour. 1812, 1816.

Fam. 1. ALCYONIDAS.

Alcyonidæ, Johnst. Hist. Brit. Zooph. 2nd edit. p. 174.

Les Alcyons, Cuv. Règ. Anim. iii. 320.

Polypi tubiferi, Lamk. An. s. Vert. ii. 403.

Alcyonaria, Blainv. Man. 519.

Lobulariadæ, Johnst. in Trans. Berw. Nat. Club, i. 107; J. E.

Gray in Syn. Brit. Mus. 135. Halcyonina, Ehrenb. Corall. 56.

Alcyonina, Wiegm. & Ruthe, 595.

1. ALCYONIUM.

Alcyonium, Linn.; Pallas, 1766; Lam. 1801 (not 1806); Lamx. 1812, 1816.

Lobularia, Lamk. 1816; Blainv.; Ehrenb.

Cydonium (animal, not sponge), Fleming, 1828.

Achilleum, Oken, Lehrb. 1815, 82.—A. manus diaboli. A. papillosa.

Magina, Oken, Lehrb. 1815, 83.=A. lobatum.

Korkschwamm, Oken, Lehrb. 1815, 84.=A. arboreum.

1. ALCYONIUM digitatum.

Alcyonium ramosa digitatum, Raii Syn. 31. no. 2; Breyn. in Ephem. Acad. Leopold. cent. 8. app. 159; Bast. Opusc. subs. i. 24. t. 3. figs. 6, 7 (pessima).

Main de mer, Jussieu in Mém. Acad. Roy. des Sc. an. 1742, 294.

t. 9. fig. 1.

Dead man's hand, or Dead man's toes, Ellis, Corall. 83. no. 2. pl. 32. fig. a. A. A. 2.

Alcyonium manus marina, Ellis in Phil. Trans. liii. 431. t. 20.

figs. 3?, 10.

Magina lobata digitata, Oken, Lehrb. Nat. 83.

A. digitatum, Linn. Syst. 1294; Müll. Zool. Dan. Prod. 255; Fab. Faun. Grænl. 447; Ellis and Soland. Zooph. 175. pl. 1. fig. 7; Jameson in Wern. Mem. 1.563; Flem. in Edinb. Phil. Journ. ix. 251; Cwv. Règ. Anim. iii. 321; Templeton in Mag. Nat. Hist. ix. 470; Harvey in ibid. n. s. 1.475. figs. 56, 57 (very inaccurate); Maegillivray, Ann. & May. Nat. Hist. ix. 465; Couch, Zooph. Cornw. 27; Corn. Faun. iii. 58, pl. 13. fig. 2; Johnst. Brit. Zooph. 2nd edit. p. 176. f. 38. t. 34.

Alcyonium molle, Esper, p.56. t.18. B. fig. 42, encrusting the tube

of the Amphitrite.

Alc. lobatum, Pall. Elench. 351; Lamour. Cor. Flex. 336. pl. 12. fig. 4, and pl. 13. fig. omn.; Corall. 243. pl. 12. fig. 4, pl. 13 and pl. 14. fig. 1.

Lobularia lobatum, Deslongchamps, E. M. 498.

Lobularia digitata, Lam. Hist. ii. 413, 2nd edit. ii. 631; Flem. Brit. Anim. 515; Grant, Edinb. Journ. of Sc. no. 15; Stark, Elem. ii. 421; Johnst. Trans. Newc. Soc. ii. 250. pl. 8; Roget, Bridgw. Treat. i. 162. fig. 56; Blainv. Actinol. 521; Ehrenb. Corall. 57.

Lobularia grandiflora, Chamisso, Ehrenb. Corall. R. M. 57.

Alcyonium Cydonium, Müll. Zool. Dan. iii. p. 1, t. 8, figs. 4, 5.
Lobularia conoidea, Lam. Anim. s, Vert. 2nd edit. ii. 632; Deslongchamps, E. M.

Cydonium Mulleri, Couch, Zooph. Cornw. 28 (not of Fleming, Brit. A., nor Blainv., which is a sponge).

Alcyonium exos., Spix, Ann. Mus. xiii. 451. 31. Alcyonium pulmo, Esper, Supp. ii. t. 9, dry.

a, b, c. In spirits. Coast of Kent. W. E. Leach, M.D. d, e. Dry. Presented by J. E. Gray, Esq.

2. ALCYONIUM glomeratum.

Aleyonidium rubrum, Hassall, Ann. Nat. Hist. vii. 285.
Ale. glomeratum, Johnst. Hist. Brit. Zooph. 2nd edit. p. 178.
Aleyonidium glomeratum, Hassall, Ann. Nat. Hist. xi. 112.
Aleyonium sanguineum, Couch, Corn. Faun. iii. 60. pl. 13. fig. 1.
Inhab. Cornwall, Couch.

2. SARCODICTYON.

Sarcodictyon, E. Forbes; Johnst. 1847. Sarcorete, Johnst. MSS.

I. SARCODICTYON catenata.

Sarcodictyon catenata, E. Forbes; Johnst. Hist. Brit. Zooph. 2nd edit. p. 179. t. 33. fig. 4-7. Sarcorete catenata, Johnst. MSS. Brit. Mus.

a. Scarborough. Presented by G. Johnston, M.D.
b. Cornwall. Presented by G. Johnston, M.D. The dry specimen exactly resembles Zoanthus Couchii.

Fam. 2. GORGONIADE.

Ceratophytes, Cuv. Règ. Anim. iii. 309. Porypiers corticifères, Lam. Anim. s. Vert. ii. 288. Gorgoniadæ, Flem. Brit. Anim. 511; Johnst. Hist. Brit. Zooph. 2nd edit. p. 166. Ceratophyta corticosa, Schweig. Handb. 432. Corallia, Blainv. Man. 501. Ceratocorallia s. Gorgonina, Ehrenb. Corall. 133. Isidea, Ehrenb. Corall. 123. Corallina, Wiegm. & Ruthe, Handb. 594, 1832. Coralliadæ, J. E. Gray, Syn. Brit. Mus. 134.

1. GORGONIA.

Gorgonia, Linn.; Lam. 1801. Eunicea, sp. Ehrenb.

1. GORGONIA VEITUCOSA.

Frutex marinus flabelliformis, Raii Hist. Plant. iii. 7; Sir H. Sloane, Phil. Trans. abridg. 1746, ix. 198. pl. 4. fig. 4. Keratophyton flabelliforme, cortice verrucosa obductum, Raii

Syn. 32.

Erica marina alba frutescens, Petiv. Mus. cent. prim. 9. no. 50. Lithophyte second, 3 and 8, Mars. Hist. Phys. de la Mer, p. 93. pl. 17. fig. 81, p. 96. pl. 18. fig. 82, p. 104. pl. 21. fig. 97-100.

Warted Sea-fan, Borl. Cornw. 238. t. 24. fig. 1.

Gorgonia verrucosa, Linn. Syst. 1291; Pall. Elench. 196; Ellis and Soland. Zooph. 89; Esper, Pflanz. Gorg. t. 16. figs. 1, 2; Cavol. Polyp. Mar. 29. t. 1. fig. 1-11, t. 4. fig. 1-16; Lamk. Anim. s. Vert. 2nd edit. ii. 491; Lamk. Mém. du Mus. ii. 82; Flem. Brit. Anim. 512; D. Chiaje, Anim. s. Vert. Nap. iii. 24 and 27. t. 33. fig. 4-7; Couch, Zooph. Cornw. 26; Corn. Faun. iii. 56. pl. 12. fig. 1; Johnst. Hist. Brit. Zooph. 2nd edit. p. 167. t. 32. fig. 1.

Gorg. viminalis, Sow. Brit. Misc. 81. pl. 40; not Pallas nor Esper, t. 11.

Eunicea verrucosa, Ehrenb. Corall. 136.

a. Devonshire, J. Couch, Esq. Presented by G. Johnston, M.D.

2. Gorgonia pinnata.

Gorgonia pinnata, Linn. Syst. edit. x. 802; Linn. Syst. 1292; Müll. Zool. Dan. Prod. 254; Ellis and Soland. Zooph. 87. t. 14. fig. 3; Rathke, Müll. Zool. Dan. iv. 37. t. 153; Johnst. Hist. Brit. Zooph. 2nd edit. p. 168. t. 33. figs. 1-3, not Lank. n. 17?

G. viminalis, Walker, Wern. Mem. i. 560.

a. Zetland, E. Forbes, Esq. Presented by G. Johnston, M.D.

2. MURICEA.

Muricea, Lamk. Gen. Pol.; Blainv. Gorgonia, sp. Pallas, Lamk.

1. MURICEA Placomus.

Warted Sea-fan, Ellis, Corall. 67. no. 1. t. 27. figs. a. A. 1, 2, 3. Gorgonia Placomus, Pall. Elench. 201; Linn. Syst. 1290; Ellis and Soland. Zooph. 86; Esper, Gorgon. t. 33, 34, and 34 A; Lamk. Mém. du Mus. ii. 83; Anim. s. Vert. ii. 316, 2nd edit. ii. 492; Blainv. Dict. Sc. Nat. lx. 469; Flem. Brit. Anim. 512; Couch, Zooph. Cornw. 25; Corn. Faun. iii. 55. pl. 12. fig. 2; Johnst. Hist. Brit. Zooph. 2nd edit. p. 169, t. 32. fig. 2. Muricea Placomus, Ehrenb. Roth. Meer. 134?

Inhab. "Coast of Cornwall," Ellis. A doubtful native.

3. PTEROGORGIA.

Pterogorgia, Ehrenb. Corall, 145, Gorgonia, sp. Pallas, Lamk. Gorgonia A, Blainv. Man. 469.

1. Prenogorgia anceps.

Keratophyton dichotomum, caule et ramulis leviter compressis, Raii Syn. 32.

Sea Willow, Ellis, Corall. 68. no. 2. t. 27. fig. g.

Gorgonia anceps, Pall. Elench. 183; Ellis & Soland. Zooph. 89; Gmel, Syst. 1292; Esper, Pflanz. Gorg. t. 7. fig. 1-3; Lamk. Anim. s. Vert. ii. 317, ed. 2. ii. 494; Lamour. Cor. Flex. 395; Lamk. Mém. du Mus. ii. 84; Hist. ii. 317, 2nd edit. ii. 494; Johnst. Hist. Brit. Zooph. 2nd edit. p. 169. fig. 36. t. 32. fig. 3. Pterogorgia anceps, Ehrenb. Corall. 145.

Inhab. Margate, Dale. A doubtful native.

4. PRIMNOA.

Primnoa, Lamouroux, Bull. Soc. Phil. 1812, 188; Johnst. Brit. Zooph. 2nd edit. 171; Blainv. D. S. N. Ix. 474. Gorgonia, sp. Pallas.

Gorgonia C, Blaine. Man.

1. PRIMNOA lepadifera.

Reseda similis maritima, Raii Hist. Pl. i. 68.

Gorgonia reseda, Pall. Elench. 204,

Gorgonia lepadifera, Linn. Syst. 1289; Bust. Opusc. subs. ii. 130. t. 13. fig. 1; Ellis and Soland. Zooph. 84. t. 13, figs. 1, 2; Jameson, Wern. Mem. i. 560; Stew. Elem. ii. 430; Lum. Hist. An. s. Vert. ii. 323, 2nd edit. 507.

Primnoa lepadifera, Lamour. Bull. Soc. Phil. 1812, iii. 188; Corall. Flex. 223; Flem. Brit. Anim. 513; Ehrenb. Corall. 133; Blainv. Act. 510. pl. 87. fig. 6; Johnst. Hist. Brit. Zooph.

2nd edit. p. 171. fig. 37.

-? Presented by G. Johnston, M.D.

Doubtful Natives.

1. IRIS hippuris, Linn.; Ellis, Zooph. 105, t. 3. figs. 1, 5. Inhab. West Indies. East coast of Scotland, Walker. Orkney. Jameson, Wern. Mem. i, 560.

2. IRIS extrochus, Turt. Brit. Faun. 206, is the stem of a fossil Pentacrinus.

Suborder II. LIBERA.

Polypes flottans, Lam. 1812, 1816.

Fam. 1. PENNATULIDÆ.

Pennatula, Linn. Syst. x. 818; Pall. Elench. 362; Linn. Syst. 1321. Les Pennatules, Cuv. Rèq. Anim. iii. 317, 1817.

Polypi natantes, Lum. Anim. s. Vert. ii. 413, 1816.

Pennatulidae, Flem. Brit. Anim. 507; J. E. Gray, Syn. Brit. Mus. 132; Johnst. Hist. Brit. Zooph. 2nd edit. p. 157.

Pennæ marinæ, Schweig. Handb. 401, 1820.

Pennatularia, Blaino. Dict. S. N. lx. 476, 1830; Man. 512, 1834. Calamites, Latr. Fam. Nat. 543.

Pennatulina, Ehrenb, Corall, des Roth, Meer. 63.

1. PENNATULA.

Pennatula, sp. Linn. Pennatula, Lamk. 1801, 1816; Cuvier, 1817. 1. PENNATULA phosphorea.

Penna marina, Imp. Ital. 650; Planch. Conch. 108. t. 8. E. D.;

Sib. Scot. ii. lib. tert. 28.

Penna marina rubra, Albin, Annot. Acad. i. t. 6. figs. 3, 4, 5;
Ellis, Phil. Trans. liii. 434. t. 21. figs. 1, 2, 3 (419. t. 19. fig. 1-4, var. β. Pallas).

Penna rubra, Bohad. Anim. Mar. 101. pl. 8. figs. 1-3.

Pennatula phosphorea, Linn. Syst. 1332; Ellis, Phil. Trans. liii. 420. pl. 19. figs. 1-5; Müll. Zool. Dan. Prod. 255. no. 3075; Esper, Pflanz. Pennat. t. iii. figs. 1-3; Oliv. Zool. Adriat. 294; Wern. Mem. i. 565; Turt. Bril. Faun. 217; Stew. Elem. ii. 450; Blumenb. Man. 274; Lam. Syn. 380; Anim. s. Vert. ii. 426, 2nd edit. ii. 643; Cuv. Règ. Anim. 2nd edit. iii. 318; Blainv. Man. Act. 517; Ehrenb. Roth. Meer. 66; Flem. Brit. Anim. 507; Stark, Elem. ii. 420; Johnst. Trans. Newc. Soc. ii. 248. pl. 7; Roget, Bridgw. Treat. i. 174. figs. 71, 72 (bad); Johnst. Hist. Brit. Zooph. 2nd edit. p. 157. fig. 35.

P. rubra, Pall. Elench. 368.

P. Britannica, Ellis and Soland. Zooph. 61.

Pennatole fosforea, Delle Chiaje, Anim. s. Vert. Nap. iii. 4 and 11. t. 31. fig. 15.

a. In spirits. Presented by G. Johnston, M.D.

b, c, d. Dry. Coast of England.e, f. Dry. Orkney. Hebrides.

2. VIRGULARIA.

Virgularia, Lamk. 1816; Blainv. Dict. S. N. lx. 1830, 478. Virgulaire, Lamk. 1812 (no char.). Scirpearia, Templeton, not Cuvier.

1. VIRGULARIA mirabilis.

Pennatula mirabilis, Linn. Syst. 1322; Mill. Zool. Dan. i. p. 11, t. 11. figs. 1-3; Ellis and Soland. Zooph. 63; Sowerby, Brit. Misc. 51. pl. 25; Jameson, Wern. Mem. i. 565.

Virgularia mirabilis, Lam. Anim. s. Vert. ii. 430, 2nd edit. ii. 647; Flem. Brit. Anim. 507; Grant, Edinb. Journ. of Sci. no. 14; Johnst. Hist. Brit. Zooph. 2nd edit. p. 161. t. 30.

Scirpearia mirabilis, Templeton, Mag. Nat. Hist. ix. 470. La Virgulaire à ailes laches, Blaine. Act. 514, pl. 90. fig. 3. a, b, c. In spirits. Presented by G. Johnston, M.D.

d, e. Dry. South Devon. G. Montague, Esq.

3. PAVONARIA.

? Funiculine, Lam. Ext. du Cour. 1812. Funiculina, sp. Lam. Hist. ii. 423, 1816.

Pavonaria, Cuv. 1817; Blainv. Dict. S. N. Ix. 480, 1830; Ehrenb. Cor. R. M. 1834; Johnst. Brit. Zooph. 1847. 1. PAVONARIA quadrangularis.

Pennatula, Ellis, Phil. Trans. liii. t. 20, fig. 8.

Pennæ piscis, Bohads. An. Mar. 112. t. 9. figs. 4, 5.

Pennatula quadrangularis, Pall. Elench. 372.

Pennatula antennina, Linn. Syst. 1323; Ellis & Soland. Zooph. 63. Funiculina tetragona, Lam. Anim. s. Vert. ii. 423, 2nd edit. 641. Pavonaria antennina, Cucier; Schweig. Handb. 435; Ehrenb. Corall. des Roth. Meer. 64.

Pavonaria quadrangularis, Blainv. Act. 516. pl. 90. fig. 1 (copied from Bohadsch); Forbes, Ann. Nat. Hist. xiv. 414; Johnst. Hist. Brit. Zooph. 2nd edit. p. 164. t. 31; Forbes, Rep. Brit.

Assoc. 1845, 66.

a, b. Dry. North Sea. Presented by G. MacAndrew, Esq.

Order III. POLYPIARIA.

Les Sertulairiens, Audouin & M. Edwards in Lam. Anim. s. Vert. ü. 105.

Zoophyta hydroida, Johnst. Mag. Zool. & Bot. i. 447.

Polypiaria, Gray, Syn. Brit. Mus. 133.

Polypiaria part., Blainv. Dict. S. N. 1830; Man. Act. 1834.

Nudibrachiata, Farre, Phil. Trans. 1837.

Hydrozoa, Owen, Lect. 82.

Anthozoa hydroida, Johnst. Brit. Zooph. 2nd edit. 5.

Suborder I. TUBULARINA.

Tubularia, Linn. Syst. Nat.

Tubularina, Ehrent. Corall. des Roth. Meer. p. 70; Johnst. Brit. Zooph. 2nd edit. 29.

Tubularidæ, Johnst. Brit. Zooph. 1st edit. 1837.

Les Tubulaires, Van Beneden.

Fam. 1. Corynidæ.

Corynidæ, Johnst. Trans. Berw. Club (1836), p. 107; Hist. Brit. Zooph. 2nd edit. p. 30.

Corynaidæ, Gray, Syn. Brit, Mus. (1840), p. 76.

Coryne, Lam. Anim. s. Vert. ii. 61; Flem. Brit. Anim. 553; Blainv. Man. Act. 471; Schweig. Handb. 409.

Les Corines, Cuvier, Règ. Anim. iii. 295.

Tubularise pars, Pallas, Spic. Zool. fasc. x. pp. 36, 37.

Hydræ pars, Müller, Zool. Dan. Prod. p. 230.

1. CLAVA.

Clava, Gmelin, Berl. Mag. 1775; Oken, Lehrb. Nat. 50, 1815; Johnst. Brit. Zooph. 29.

? Fistulana, Oken, Lehrb. Nat. 55, 1815.

Corina, Leach, MSS. Brit. Mus. 1819. Coryna, Ehrenb. Corall. 1834.

I. CLAVA multicornis.

Polyporum species margine conchæ insidentes, Bast. Opusc. subs. i. 44. t. 5. fig. 2 c.

Zoophyton minutum Coryne simillimum, Pall. Spic. Zool. fasc. x.

36. t. 4. fig. 9 d. D. E. F. Hydra multicornis, Forsk. Desc. Anim. 131. no. 87. t. 26 B. b,

copied in Encyclop. Méthod. pl. 69. figs. 12, 13.

Coryna multicornis, Ehrenb. Corall. des. roth. Meer. 69; Lam. Anim. s. Vert. 2nd edit. ii. 74; Templeton, Mag. Nat. Hist. ix. 419; Blainv. Act. 471.

Molluscum, Müll. Besch. der Berl. Gesell. Nat. 400. t. 5. figs. 3, 4. Hydra squamata, Müll. Zool. Dan. Prod. 230, no. 2786; Zool. Dan. i. 3. t. 4. figs. 1-3, copied in Encyclop. Méthod. pl. 69.

figs. 10, 11; Fabr. Faun. Grant. 347.

Coryne squamata, Oken, Lehrb. Nat. 51; Lam. Anim. s. Vert. ii. 62, 2nd edit. ii. 73; Jameson, Wern. Mem. i. 565; Flem. Edinb. Phil. Journ. ii. 87; Phil. Zool. ii. 616. t. 5. fig. 1; Brit. Anim. 553; Coldstream, Edinb. New Phil. Journ. ix. 234; Blainv. Act. 471; Stark, Elem. ii. 443; Sars, Bidr. til Soëdyr. 1. p. 1; Johnst. Br. Zooph. 109. pl. 2. fig. 1-3; Hassall, Ann. & Mag. Nat. Hist. vii. 283; Macgilliv. ibid. ix. 463; Couch, Zooph. Cornw. 2; Corn. Faun. iii. 11. pl. 1. fig. 1; Van Beneden, Tubul. 60. pl. 5. figs. 1-14.

Clava parasitica, Turt. Gmel. iv. 100.

Tubularia affinis, Turt. Gmel. iv. 668; Turt. Brit. Faun. 210; Stew. Elem. ii. 438.

Fistulana multicornis, Oken, Lehrb. Nat. 55.

Clava multicornis, Johnst. Hist. B. Z. p. 30. pl. 1. figs. 1-3, 467. a. In spirits. Presented by G. Johnston, M.D.

b. In spirits (" Corina, Leach MSS."). S. coast of Devon. Presented by J. Cranch, Esq.

2. HYDRACTINIA.

Hydractinia, Van Beneden, Bull. Acad. Brux. xii. 1841; Johnst. Brit. Zooph. 2nd edit. 34.

Echinochorium, Hassall, Ann. N. H. xv. 248, 1841.

Synhydra, Quatrefages. 7 Dysmorphosa, Philippi.

Podocoryna, Sars, Faun. Lit. Norveg. i. 4.

Aleyonium, sp. Blainv. 1830.

L. HYDRACTINIA echinata.

Alevonium echinatum, Flem. Brit. Anim. 517; Johnst. Trans. Newe. Soc. ii. 251. t. 9. fig. 2; Blainv. Dict. Sc. Nat. lx. 488; Man. Act. 525; Gray, Zool. i. 204; Gould, Massachus. 351.

Alcyonidium echinatum, Johnst. Brit. Zooph, 304. t. 42. figs. 3, 4;

Couch, Corn. Faun. 134.

Hydractinia echinata, Johnst. B. Z. ed. 2, 34, t. 1, figs. 4-6, 467. Coryne squamata var., Johnst. Brit. Zooph. iii. t. 2. figs. 4, 5; Couch, Corn. Foun. 12. t. 1. fig. 2.

Echinocorium clavigerum, Hassall, Ann. & Mag. N. H. vü. 371. t. 10. fig. 5, xii. 117; Maegill. Ann. & Mag. N. H. ix. 463. Hydractinia lactea, Van Beneden, Tubul. 64, t. 6. figs. 7-14; Ann. Nat. Hist. xv. 250.

Coryne Hassalli, Forbes, Ann. Nat. Hist. xii. 189.

Synhydra parasites, Quatrefages, Ann. Sc. Nat. xx. 232. t. 8, 9. a. Berwick Bay, on shells. Presented by G. Johnston, M.D. b, c. Devonshire, on shells. Presented by G. Johnston, M.D. d. Coldingham, on shells. Presented by G. Johnston, M.D.

2. HYDRACTINIA? (Alderi).

Hydractinia Alderi, Johnst. Brit. Zooph. 2nd edit. 463. fig. 79 a. Inhab. Coast of Northumberland, Newbiggin-by-the-Sea, J. Alder, Esq.

3. Hydractinia? minuticornis?

Hydra corynaria, Templeton, Mag. N. H. ix. 419. f. 58; Johnst. Brit. Zooph. 2nd edit. 36. fig. 4; not Bosc.

Hydra lutea, Flem. Brit. Anim. 554; Jameson, Wern. Mem. i. 565; not Bose.

Hydra littoralis, Johnst. Brit. Zooph. 1st edit. 98,

Hydra minuticornis, Müller, Zool. Dan. Prod. n. 2788.

Inhab. Belfast Lough, 1810, Templeton.

3. CORYNE.

Coryne, Gærtn. in Pallas, Spic. Zool. x. 40; Johnst. Brit. Zooph. 2nd edit. 39.

Stipula, Sars.

Syncoryna, Ehrenb. Roth. Meer. 70. Hermia, Johnst. Brit. Zooph. 111. Capsularia, Oken, Lehrb. Nat. 55, 1815.

I. CORYNE pusilla.

Coryne pusilla, Gærtn. in Pallas, Spic. Zool. fasc. x. 40. t. 4. fig. 8, cop. in Encyclop. Method. pl. 69. figs. 15, 16; Johnst. Hist. Brit. Zooph. 39, 467, t. 2.

Tubularia Corvne, Pallas in lib. cit.; Turt. Gmel. iv. 668; Turt.

Brit. Faun. 210.

Hydra ramosa, Fabr. Faun. Grænl. 348.

Coryne glandulosa, Lam. Anim. s. Vert. ii. 62, 2nd edit. ii. 74; Flem. Edinb. Phil. Journ. ii. 87, & viii. 295; Phil. Zool. ii. 616. t. 5. fig. 2; Brit. Anim. 553; Johnst. Trans. Newc. Soc. ii. 253, & Mag. Nat. Hist. v. 631. fig. 110; Blainv. Act. 471. pl. 85. figs. 3, 3 a, copied from Gartner.

Syncoryna pusilla, Ehrenb. Corall. des Roth. Meer. 70; Van Be-

neden, Les Tubul, 53. pl. 3. figs. 1-10.

Hermia glandulosa, Johnst. Bril. Zooph. 111. vign. no. 12, and pl. 4. figs. 1, 2; Thompson, Ann. Nat. Hist. v. 249; Hassall, Ann. Nat. Hist. vii. 283. pl. 6. fig. 2; Couch, Zooph. Cornw. 3, and Corn. Faun. iii. 12. pl. 1. fig. 3.

Var. a. Cor. pusilla, Ehrenb., not Gærtn.; Johnst. l. c. t. 4. figs.

1. 2.

b. Cor. Listerii, Johnst. I. c. 41. t. 2.

Coryne, Lister, Phil. Trans. 1834, 376. t. 10. fig. 3. Syncoryna Listeri, Van Bened. Tubul. 54. t. 3. figs. 11, 12.

c. Cor. ramosa, Ehrenb. Corall. 71; Johnst. l. c. 42. t. 6.

figs. 4, 5.

Tubularia muscoides, Linn. S. N. 1302; Agardh, K. V. Akad. Handt. 1816, 256. t. 7. fig. 1; Thompson, Ann. N. H. v. 250; Lamx. Exp. Meth. 17. t. 68. figs. 6, 7. Fistularia muscoides, Müll. Zool. Dan. Prod. 254.

Fistulana muscoides, O. Fabr. Faun. Gran. 442.

d. C. Chamissonis, Johnst. l. c. 43.

Coryna ramosa, Chamisso and Eysenh. Nov. Act. Acad. Cur. x. 370. t. B. fig. 3.

Syncoryna Chamissonis, Ehrenb. Cor. Roth. Meer. 71;
Van Beneden, Tubul. 55; Ann. N. H. xv. 249.

a, b, c. Devonshire. Miss Amelia Griffiths. Presented by G. Johnston, M.D.

d. Strangford Lough. W. Thompson, Esq. Presented by G. Johnston, M.D.

e. Berwick Bay. Presented by G. Johnston, M.D. 2f. Berwick Bay. Presented by G. Johnston, M.D.

g. In spirits. Presented by G. Johuston, M.D.

4. CORDYLOPHORA.

Cordylophora, Allman, Ann. N. H. xiii. 330; Johnst. Brit. Zooph. 2nd edit. 44.

1. CORDYLOPHORA lacustris.

Cordylophora lacustris, Allman, Ann. N. H. xiii. 330; Johnst. Hist. Brit. Zooph. p. 44. fig. 5.

Inhab. Dublin, Grand Dock, Allman.

Fam. 2. TUBULARIADÆ.

Tubulariadæ, Johnst. Trans. Berw. Cl. 107; Gray, Syn. Brit.

Mus. 76; Johnst. Hist. Brit. Zooph, p. 45.

Tubularia, Linn. Syst. edit. 10, i. 803; Pollas, Elench. 79; Linn. Syst. 1301; Lam. Anim. s. Vert. ii. 108; Blaine. Act. 469; Schweig, Handb, 424.

Fistularia, Müller, Zool. Dan. Prod. 32. Calamella, Oken, Lehrb. Nat. 53, 1815.

1. EUDENDRIUM.

Calamella, sp. Oken, Lehrb. Not. 53, and Introd. iv. Eudendrium, Ehrenb. Roth. Meer. 72. Fistularia, sp. Müller; Lamx. 1812. ! Siphorus, Rafinesque, Caratt. Nov. Generi, 96, 1810.

1. EUDENDRIUM ramosum.

Corallina tubularia gracilis et ramosa, axillis ramulorum contortis, Ellis, Corall. 31. no. 3. t. 16. fig. A. & t. 17. figs. a, A.

Tubularia ramosa, Linn. Syst. x. 804; Linn. Syst. 1302; Soland. Zooph. 32; Oliv. Zool. Adriat. 276; Berk. Syn. i. 214; Turt. Brit. Faun. 210; Stew. Elem. ii. 437; Wern. Mem. i. 563; Lam. Anim. s. Vert. ii. 110, 2nd edit. ii. 126; Lamx. Corall. Trans. 101; Flem. Brit. Anim. 552; Blainv. Act. 470. pl. 30. fig. 3, copied from Ellis; Hogg's Stock. 34; Stark, Elem. ii. 441. pl. 8. fig. 15, from Ellis; Templeton, Mag. N. H. ix. 466; Thompson, Ann. N. H. v. 250; Lumr. Exp. Meth. 17; Couch, Zooph. Cornw. 4; Corn. Faun. iii. 14; Gould's Massachus. 350.

Tubularia Sertularia ramosa, Dalyell, Anim. Scotl. i. 64. t. 11. Tubularia trichoides, Pall. Elench. 84; Lamx. Corall. 101; Blaine, Act. 470.

Fistularia ramosa, Müll. Zool. Dan. Prod. 254 (not Fistularia ramosa, O. Fabr.).

Eudendrium ramosum, Ehrenb. Corall. Roth. Meer. 72; Johnst. Hist. Brit. Zooph. p. 46. t. 6. figs. 1, 2, 3, 467; not Van Beneden.

- a. Devonshire, Mrs. Griffith. Presented by G. Johnston, M.D.
- b. Frith of Forth. Presented by G. Johnston, M.D. c. Berwick Bay. Presented by G. Johnston, M.D.

d. Bootle. Presented by G. Johnston, M.D.

e. Northumberland. Presented by G. Johnston, M.D. f. Isle of Man, E. Forbes, Esq. Presented by G. John-

ston, M.D.

2. TUBULARIA.

Tubularia, sp. Linn. Syst. Nat.; Lamx. Bull. Soc. Philom. 111, 1812; Ehrenb. Roth. Meer. 71; Johnst. Brit. Zooph. edit. 1, edit. 2. 48.

Calamella, sp. Oken, Lehrb. Nat. 55, 1815. Eudendrium, sp. Ehrenb. Roth. Meer. 72, 1834. Tubularia β , Cuvier, Tab. Elem. 665, 1798.

1. TUBULARIA indivisa.

Remarkable Sea-plant, Lhwyd, Phil. Trans. abridg. vi. 73. pl. 3. fig. 1.

Adianti aurei minimi facie planta marina, Raii Syn. 31. no. 4; Jussieu, Mém. Acad. Roy. des Sc. 1742, p. 296. t. 10. fig. 2.

Tubular Coralline like oaten pipes, Ellis, Phil. Trans. xlviii. t. 17. fig. D; Phil. Trans. abridg. x. 453. pl. 10. fig. D; Ellis, Corall. 31. no. 2. t. 16. fig. 6, copied in Esper, Tubul. t. 27. fig. 1.

Tubularia indivisa, Linn. Syst. x. 803; Linn. Syst. 1301; Ellis and Soland. Zooph. 31; Berk. Syn. i. 214; Blumenb. Man. 272; Turt. Brit. Faun. 210; Stew. Elem. ii. 437; Jameson, Wern. Mem. i. 563; Lam. Anim. s. Vert. ii. 110, 2nd edit. ii. 125; Lamx. Cor. Flex. 230; Expos. Méthod. 17; Cur. Règ. Anim. iii. 299; Bosc, Vers, iii. 89. pl. 28. fig. 5, a reduced copy from Ellis; Oken, Lehrb. Nat. 55; Cuv. Tab. Elem. 665; Flem. Brit. Anim. 552; Johnst. Trans. Newc. Soc. iii. 252; Dalyell, Edinb. New Phil. Journ. xvii. 411 & xxi. 93, & Rep. Brit. Assoc. 1834, 600; Anim. Scott. i. t. 1, 2, 3, 4; Lister, Phil. Trans. 1834, 366. pl. 8. fig. 1; Harvey, Mag. Nat. Hist. n. s. ii. 511; Gould's Massachus. 350; Thompson, Ann. Nat. Hist. v. 250; Couch, Zooph. Cornw. 3; Corn. Faun. iii. 13. pl. 2. figs. 1, 2; Johnst. Hist. Brit. Zooph. p. 49. t. 3. figs. 1, 2, 467.

Tubularia calamaris, Pallas, Elench. 81; Ehrenb. C. R. M. 71.

Tubularia gigantea, Lamx. Expos. 17. t. 68. fig. 5.

La Tubulaire chalumeau, Blainv. Act. 470.

a, b. Berwick Bay. Presented by G. Johnston, M.D.

2. Tubularia Dumortierii.

Tubularia Dumortierii, Van Beneden, Les Tubul. 50. pl. 2; Johnst. Hist. Brit. Zooph. 2nd edit. p. 50. t. 7. figs. 1, 2. a. Berwick Bay. Presented by G. Johnston, M.D.

3. Tubularia Larynx.

Var. a. The tubes simple or undivided.

Fucus Dealensis fistulosus, laryngæ similis, Raii Syn. i, 39. no. 8; Pétiv. Oper. ñi. 39. no. 406; Ellis, Phil. Trans. abridg. x. 453. pl. 10. fig. c, & xi. pl. 5. fig. 3, young.

Tubulous Coralline wrinkled like the windpipe, Ellis, Corall. 30.

no. 1. t. 16. fig. b.

Corallina tubularia laryngi similis, Bast. Opusc. subsec. 41. t. 2. figs. 3, 4, & t. 3. figs. 2-4.

Tubularia muscoides, Pall. Elench. 82; Berk. Syn. i. 214; Turt. Brit. Faun. 210; Esper, Tub. t. 4. figs. 1, 2 (the figures in t. 4 are all copied from Baster.); Stew. Elem. ii. 438; Lamour.

Corall. 101; Flem. Brit. Anim. 552.

Tubularia Laryux, Ellis and Soland. Zooph. 31; Lam. Anim. v. Vert. ii. 110, 2nd edit. ii. 126; Hogg's Stock. 34; Thompson, Ann. Nat. Hist. v. 250; Hassall, Ann. & Mag. Nat. Hist. vii. 284; Maegillivray, ibid. ix. 463; Gould's Massachus. 350; Johnst. Brit. Zooph. 2nd edit. p. 51. t. 3. fig. 3, & t. 5. figs. 3, 4. 467; Dalyell, Anim. Scotl. i. 42. t. 5.

Var. B. The tubes subramose. Tub. ramosa, Esper, Tub. t. 9.

6gs. 1-3.

Eudendrium bryoides, Ehrenb. Corall. des Roth. Meer. 72. Windpipe Coralline, Couch, Zooph. Cornw. 4; Corn. Faun. iii. 13.

pl. 2. fig. 3.

a. Presented by G. Johnston, M.D.

b. From bottom of a vessel from Halifax to Liverpool, and from thence to Belfast, W. Thompson, Esq. Presented by G. Johnston, M.D.

c. Var. B. Presented by G. Johnston, M.D.

4. TUBULARIA gracilis.

Tubularia gracilis, Harvey, Proc. Zool. Soc. 1836, p. 54; Johnst. Hist. Brit. Zooph. 2nd edit. t. 4. figs. 3, 4, 5.

Tub. Larynx, var. B, Johnst. Brit. Zooph. 116.

Tub. Catamaris, Van Beneden, Les Tubul. 46. pl. 1. figz. 1-6. Inhab. Devonport, on chains of floating bridge, Harvey.

5. TUBULARIA polyceps.

Tubularia polyceps, Dalyell, Rep. Brit. Assoc. 1834, 601; Edinb. New Phil. Journ. xxi. 93; Anim. Scotl. i. t. 12 to 21.

Inhab, Scotland.

Note. Tubularia flabelliformis, Adans. Linn. Trans. v. 12, is a minute Diatomacca.

3. CORYMORPHA.

Corymorpha, Sars, Besk. 7; Forbes and Goodsir; Johnst. Brit. Zooph. 2nd edit. 53.

Ellisia, Forbes, Athenaum, 1840.

I. CORYMORPHA nutans.

Corymorpha nutans, Sars, Besk. 7. pl. 1. fig. 3; Forbes and Goodstr, Ann. Nat. Hist. v. 310; Johnst. Hist. Brit. Zooph. 2nd edit. p. 54. t. 7. figs. 3, 6.

Ellisia flos-maris, Forbes and Goodsir, Athenaum, 1840; Ann.

Nat. Hist. v. 310, 1840.

 In spirits. Orkney, Stromness, E. Forbes. Presented by G. Johnston, M. D. 2. CORYMORPHA --?

Corymorpha --- ?, Johnst. Brit. Zooph. 2nd edit. 463. fig. 79 b.

Suborder II. SERTULARINA.

Sertularia, Linn.

Sertularina, Ehrenb. Corall. des Roth. Meer. p. 73.

Fam. SERTULARIADE.

Sertulariadæ pars, Flem. Brit. Anim. 538.

Les Sertularies pars, Blaine. Act. 472.

Sertulariadæ, Johnst. Trans. Berw. Cl. 107; Gray, Syn. Brit. Mus. 76; Johnst. Hist. Brit. Zooph. 2nd edit. p. 57.

Sertularine pars, Pall. Elench. 106; Linn. Syst. 1306; Soland. Zooph. 32.

Sertulariées pars, Lamour. Expos. Méth. 9.

1. HALECIUM.

Halecium, Oken, Lehrb. Nat. 91, 1815; Schweiger, 1820; Johnst. Brit. Zooph. 2nd edit. 58.

Thoa, Lamour. 1816; Blainv. 1830.

Laomedea, sp. Lamx. 1812.

Campanularia, sp. Blainv. 1830. Halecina, J. V. Thompson, MSS.

1. HALECIUM Halecinum.

Corallina scruposa pennata, cauliculis crassiusculis rigidis, Raii Syn. i. 36. no. 15.

Herring-bone Coralline, Ellis, Phil. Trans. abridg. x. 454. pl. 10, figs. E, F, G; Corall. 17. no. 15. pl. 10; Phil. Trans. xlviii.

506. pl. 17. figs. f, E.

Sertularia Halecina, Linn. Syst. 1308; Pall. Elench. 113; Fabr. Faun. Granl. 443; Oliv. Zool. Adriat. 288; Ellis and Soland. Zooph. 46; Berk. Syn. i. 217; Esper, Pflanz. Sert. t. 21. figs. 1, 2; Turt. Brit. Faun. 213; Lam. Anim. s. Vert. ii. 119. 2nd edit. ii. 146; Flem. Brit. Anim. 542; Johnst. Trans. Newc. Soc. ii. 259. pl. 12. fig. 2; Dalyell, Anim. Scotl. i. 162. t. 27, 28, 29, 30.

Thoa Halecina, Lamour. Cor. Flex. 211; Templeton, Mag. Nat. Hist. ix. 568; Blainv. Act. 488. pl. 84. figs. 4, 4 a; Lamour. Expos. Méth. 14; Hassall, Ann. 8; Mag. Nat. Hist. vi. 167;

Couch, Zooph. Cornw. 5; Corn. Faun. iii. 15. pl. 3.

Haleciam Haleciaum, Schweig. Handb. 426; Johnst. Hist. Brit. Zooph. 2nd edit. p. 59. t. 8. p. 468.

Halecina Ellisii, J. V. Thompson, MSS.

a. Cork. J. V. Thompson, Esq. Presented by G. Johnston, M.D.

 b, c, d, e, h. Berwick Bay. Presented by G. Johnston, M.D.
 f, g. Ireland; Bangor, co. Down, W. Thompson, Esq. Presented by G. Johnston, M.D.

i. Presented by G. Johnston, M.D.

2. HALECIUM rameum.

Tubularia ramea, Pall. Elench. 83; Johnst. Brit. Zooph. 117. pl. 5. figs. 1, 2; Hassall, Ann. & Mag. Nat. Hist. vi. 167; Macgillivray, ibid. ix. 463; Couch, Zooph. Cornw. 4; Corn. Faun. iii. 15.

Tubularia Sertularia ramea, Dalyell, Anim. Scotl. i. 50. t. 6, 7, 9,

10.

Thoa Savignyi, Lamx. Exp. Méth. 15. t. 67. figs. 5, 6 (bad). Tubularia ramosa, Johnst. Trans. Newc. Soc. ii. 253. pl. 10. Eudendrium rameum, Johnst. B. Z. p. 45. t. 5. figs. 1, 2, 467.

a, b, c. Berwick Bay. Presented by G. Johnston, M.D.
d. In spirits. Presented by G. Johnston, M.D.

3. HALECIUM Beanii.

Thoa Beanii, Johnst. Brit. Zooph. 120. pl. 7. figs. 1, 2; Thompson, Ann. Nat. Hist. v. 250; Hassall, Ann. & Mag. Nat. Hist. vi. 167; Dalyell, Anim. Scotl. i. 169. t. 33. fig. 31.

Halecium Beanii, Johnst. Hist. Brit. Zooph. 2nd edit. p. 59. t. 9.

figs. 1, 2.

 Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

b. Whiteburn, Northumberland. Presented by G. John-

ston, M.D.

c. Carrickfergus, Belfast, W. Thompson, Esq. Presented by G. Johnston, M.D.

4. HALECIUM muricatum.

Sertularia muricata, Ellis and Soland. Zooph. 59, pl. 7. figs. 3, 4;
Esper, Pflanz. Sert. t. 31. figs. 1, 2; Don's Pl. and Anim. of
Forfar, 36; Turt. Brit. Faun. 215; Jameson, Wern. Mem. i.
564; Flem. Brit. Anim. 543; Hogg's Stockton, 34.

Laomedea muricata, Lamour. Cor. Flex. 209.

Campanularia muricata, Blainv. Act. 473.

Thon muricata, Couch, Zooph. Cornw. 5; Corn. Faun. iii. 16; Macgillieray, Ann. & Mag. Nat. Hist. ix. 463; Dalyell, Anim. Scott. i. 173. t. 32.

Halecium muricatum, Johnst. Hist. Brit. Zooph. 2nd edit. p. 61.

t. 9. figs. 3, 4.

a. Tay near Dundee, W. Jackson, Esq. Presented by G. Johnston, M.D.

- Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.
- c. Frith of Forth. Presented by G. Johnston, M.D.
- d. Berwick Bay. Presented by G. Johnston, M.D.

2. SERTULARELLA.

Sertularia, sp. Lamx, 1812; Blainv. 1830.

Sertularia, sp. Linn.

Sertularia a, Oken, Lehrb. Nat. 92, 1818; Johnst. Brit. Zooph. 2nd edit. 61.

1. SERTULARELLA polyzonias.

Corallina minus ramosa, Raii Syn. 35, no. 13, t. 2, fig. 4.

Great Tooth Coralline, Ellis, Corall. 5. no. 3. pl. 2. figs. a. A, b. B, & pl. 38. fig. 1 A.

Corallina pennata et siliquata, Bast. Opusc. i. 42. pl. 2. fig. 7

(pessima).

Sertularia polyzonias, Linn. Syst. x. 813; Linn. Syst. 1312; Ellis and Soland. Zooph. 37; Berk. Syn. i. 219; Esper, Pflanz. Sert. t. 6. figs. 1-6; Oliv. Zool. Adriat. 290; Turt. Gmel. iv. 683; Blumenb. Man. 273; Oken, Lehrb. Nat. 92; Turt. Brit. Faun. 216; Jameson, Wern. Mem. i. 564; Stew. Elem. ii. 447; Lam. Anim. s. Vert. ii. 117, 2nd edit. ii. 142; Lamour. Cor. Flex. 190; Risso, FEurop. Mérid. v. 130; Bosc, Vers. iii. 119; D. Chiaje, Anim. s. Vert. Nap. iv. 141; Hogy's Stock. 31; Flem. Brit. Anim. 542; Johnst. Trans. Newc. Soc. ii. 256; Templeton, Mag. Nat. Hist. ix. 468; Blainv. Act. 480; Hassall, Ann & Mag. N. H. vi. 167; Couch, Zooph. Cornw. 6; Corn. Faun. iii. 17; Johnst. Hist. Brit. Zooph. 2nd edit. p. 61. pl. 10. figs. 1-3. 468; Dalyell, Anim. Scotl. i. 134. t. 22.

Sertularia flexuosa, Linn. Syst. x. 814. no. 34.

Sertularia ericoides, Pall. Elench. 127; Esper, Pflanz. Sert. t. 12. figs. 1, 2.

Sertolara polizonia, Cavol. Polip. Mar. 224. t. 8, figs. 12-14.
Sertularia Gayi, Lamour. Expos. Méthod. 12. t. 66, figs. 8, 9 (var. β.), fig. bona.

Sertularia pinnata, Templeton, Mag. Nat. Hist. ix. 468 (var. a.);

Thompson, Ann. Nat. Hist. v. 250.

Sertularia hibernica, Johnst. Brit. Zooph. 128.
Sertularia Ellisii, M. Edwards, Lam. Anim. s. Vert. 2nd edit. ii.
142; Johnst. Brit. Zooph. 123; Couch, Zooph. Cornw. 6;
Corn. Faun. iii. 17.

Var. c. Frondose, diffuse, Johnst. Brit. Zooph. ed. 2. pl. 10. fig. 1.

Sert. denticulata, Montag. Coll. B. M.

Sert. pennata, Templeton, Mag. N. H. ix. 468.

Var. B. Caulescent, pinnate, Johnst. B. Z. ed. 2. pl. 10. fig. 2. Sert. polyzonias, Mont. Coll. B. M.

Sert. Gayi, Lamour, Exp. Meth. 12. t. 66. figs. 8, 9.

a, b, c, q, r. Presented by G. Johnston, M.D.

d, e. f. Devonshire, Mrs. Griffith. Presented by G. Johnston, M.D.

g. Northumberland. Presented by G. Johnston, M.D.
h, i, j. Berwick Bay. Presented by G. Johnston, M.D.
k, l. Ayrshire, P. W. Martin, Esq. Presented by G. Johnston

ston, M.D.

m. Zetland, E. Forbes, Esq. Presented by G. Johnston, M.D.
 n. Cornwall, R. Q. Couch, Esq. Presented by G. Johnston, M.D.

o, p. Cornwall, C. W. Peach. Presented by G. Johnston, M.D.

2. SERTULARELLA rugosa.

Snail trefoil Coralline, Ellis, Corall. 26. no. 23. t. 15. fig. a. A. Sertularia rugosa, Linn. Syst. 1308; Pall. Elench. 126; Ellis and Soland. Zooph. 52; Fabr. Faun. Grænl. 443; Esper, Pflanz. Sert. t. 11. figs. 1-4; Lam. Anim. s. Vert. ü. 121, ed. 2. ü. 149; Flem. Brit. Anim. 542; Oken, Lehrb. Nat. 92; Johnst. Trans. Newc. Soc. ü. 257. pl. 11. fig. 3; Couch, Zooph. Cornw. 6; Corn. Faun. ni. 18; Johnst. Hist. Brit. Zooph. ed. 2. p. 63. t. 10. figs. 4-6. 468.

Clytia rugosa, Lamour. Cor. Flex. 204; Templeton, Mag. Nat.

Hist. ix. 466.

La Campanulaire rugueux, Blainv. Act. 473. Sertularia patagonica, D'Orb. Amér. Mérid.

a, b, c. Berwick Bay. Presented by G. Johnston, M.D.
 d. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

3. SERTULARIA.

Sertularia, Linn.; Lamk. Syst. 382, 1800. Dynamena, Lamx. 1812; Blainv. 1830. Sertularia, sp. Lamk. 1816. Sertularia B, Johnst. Brit. Zooph. ed. 2. 64, 1847.

* Branches pinnate, simple. SERTULARIA, Lam.

1. SERTULARIA rosacea.

Lily or Pomegranate-flowering Coralline, Ellis, Corall. 8. no. 7. pl. 4. fig. a. A; Phil. Trans. abridg. x. 492. pl. 12. fig. 5. s.-11. Sertularia rosacea, Linn. Syst. 1306; Ellis and Soland. Zooph. 39; Esper, Pflanz. Sert. t. 20. figs. 1-3; Lam. Anim. s. Vert. ii. 119; Johnst. Trans. Newc. Soc. ii. 258; Templeton, l. c. 468; Couch. Zooph. Cornw. 7; Corn. Faun. iii. 18; Macgilliv.

Ann. Nat. Hist. ix. 463; Johnst. Hist. Brit. Zooph. ed. 2. p. 64, t. 11, fig. 1, 468, fig. 83; Dalyell, Anim. Scotl. i. 159, t. 26, figs. 1-13.

Sert. Nigellastrum, Pall. Elench. 129. Sert. abietina?, Fabr. Faun. Granl. 442.

Dynamena rosacea, Lamx. Bull. Soc. Phil. 1812, iii. 184; Cor. Flex. 175; Flem. Brit. Anim. 544.

a. Presented by G. Johnston, M.D.

- Devonshire, Mrs. Griffith. Presented by G. Johnston, M.D.
- c. Zetland, E. Forbes, Esq. Presented by G. Johnston, M.D.

d. Berwick Bay. Presented by G. Johnston, M.D.

e, f, g, h, i. Presented by G. Johnston, M.D.

- j. Tay, near Dundee, W. Jackson, Esq. Presented by G. Johnston, M.D.
- k. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.
- t. In spirits. Presented by G. Johnston, M.D.

2. SERTULARIA pumila.

Corallina pumila repens, Raii Syn. i. 37. no. 19.

C. pumila erecta, ramosior, Ibid. 37. no. 20. pl. 2. fig. 1.

Museus marinus, Morris, Plant. Hist. iii. 650. t. 9. fig. 2; Reaumur, Mém. de l'Acad. Roy. des Sc. 1711, 394. pl. 11. fig. 4. M.

Sea-oak Coralline, Ellis, Corall. 9, no. 8, pl. 5, fig. a. A.; Phil. Trans. xlviii. 632, pl. 23, no. 6; Phil. Trans. lvii. 437, pl. 19, fig. 11; Phil. Trans. abridg. x. 493, pl. 12, fig. 6, F.

Sertularia pumila, Linn. Syst. 1306; Pall. Elench. 130; Ellis and Soland. Zooph. 40; Esper, Pflanz. Sert. t. 10, figs. 1, 2; Oliv. Zool. Adriat. 288; Stew. Elem. ii. 441. pl. 12. figs. 10, 11, copied from Ellis; Lam. Anim. s. Vert. ii. 119, ed. 2, ii. 145; Stark. Elem. ii. 440. pl. 8, fig. 14, from Ellis; Johnst. in Trans. Newc. Soc. ii. 259; Lister, Phil. Trans. 1834, 371. pl. 8, fig. 3; Templeton, l. e. 468; Hassall, Ann. & Mag. Nat. Hist. vii. 284. pl. 6, fig. 5; Couch, Zooph. Cornw. 7; Corn. Faun. iii. 19; Johnst. Hist. Brit. Zooph. ed. 2, p. 66, t. 11, figs. 3, 4, p. 469; Dalyell, Anim. Scotl. i. 161. t. 26, figs. 14-21.

Sertolara pumila, Cavol. Pol. Mar. 216. t. 8, figs. 8-10.
Dynamena pumila, Lamx. Bull. Soc. Phil. 1812, iii. 184; Cor. Flex. 179; Flem. Brit. Anim. 544; Blainv. Act. 484; Krauss, Corall. und Zooph. der Sudsee, 28.

Scrtolara piccina, D. Chioje, Anim. s. Vert. Nap. iv. 142.

3. Slender cells distant on filamentous Algæ.

a. Youghal, Miss Ball. Presented by G. Johnston, M.D. b. Spurn Point. Presented by G. Johnston, M.D.

- c. Cornwall. Presented by G. Johnston, M.D.
 d. Westra. Presented by G. Johnston, M.D.
 e. f. On fuci. Presented by G. Johnston, M.D.
- e, f. On fuci. Presented by G. Johnston, M.D. g. Berwick Bay. Presented by G. Johnston, M.D.

3. SERTULARIA Evansii.

Sertularia Evansii, Ellis and Soland. Zooph. 58; Lam. Anim. s. Vert. ed. 2. ii. 154; Johnst. Hist. Brit. Zooph. ed. 2. p. 67. Dynamena Evansii, Lams. Cor. Flex. 177; Flem. Brit. Anim. 545. Inhab. Yarmouth, Ellis, 1767.

4. SERTULARIA Pinaster.

Sertularia Pinaster, Ellis and Soland. Zooph. 55. t. 6. fig. 6. B; Rees, Cyclop. Vermes, pl. 8. fig. 4; W. Thompson, Ann. Nat. Hist. x. 23, and in Rep. Brit. Assoc. 1843, 283; Johnst. Hist. Brit. Zooph. ed. 2. p. 71. fig. 12. 470.

Dynamena Pinaster, Lamx. Expos. Meth. 12. t. 6. fig. b. B.

a. Presented by G. Johnston, M.D.

b. Var. gracilis. Presented by G. Johnston, M.D.

5. SERTULARIA Margareta.

Sertularia Margareta, Hassall, Ann. & May. Nat. Hist. vii. 284. pl. 6. figs. 3, 4; Johnst. Hist. Brit. Zooph. ed. 2. p. 72. fig. 13. 470.

Sert. Tudori, Ryland's MSS.

S. Margarita, John, MSS.

S. Margaretta, John, MSS.

Mouth of the Mersey, — Tudor, Esq. Presented by G. Johnston, M.D.

Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

c. Presented by G. Johnston, M.D.

6. SERTULARIA fallax.

Dynamena pinnata, Flem. Brit. Anim. 545.

Sertularia pinnata, Johnst. Brit. Zooph. 127. pl. 9. figs. 5, 6;

Macgilliv. Mag. Nat. Hist. ix. 463.

Dynamena tubiformis?, Lamx. Expos. Méth. 12. pl. 66. figs. 6, 7. Sertularia fallax, Johnst. Hist. Brit. Zooph. ed. 2. p. 73. pl. 11. figs. 2, 5, 6, 469, fig. 84.

a. Dunstanborough, R. Embleton, Esq. with S. fusca. Pre-

sented by G. Johnston, M.D.

b, c, d. Frith of Forth, Dr. Coldstream. Presented by G. Johnston, M.D.

e. Whitburn, Northumberland, Miss Dale. Presented by G. Johnston, M.D.

f. Presented by G. Johnston, M.D.

7. SERTULARIA Tamarisca.

Sea Tamarisk, Ellis, Corall. 4. no. 1. pl. 1. fig. a. A.

Sertularia Tamarisca, Linn. Syst. 1307; Pall. Elench. 129; Ellis and Soland. Zooph. 36; Oliv. Zool. Adriat. 288; Don's Pl. and Anim. of Forfar, 36; Lamx. Cor. Flex. 188; Lamk. Syst. 382; Hist. Anim. s. Vert. ed. 2. ii. 153; Hassall, Ann. Nat. Hist. vi. 168; Couch, Zooph. Cornw. 8; Corn. Faun. iii. 21; Johnst. Hist. Brit. Zooph. ed. 2. p. 74. pl. 13. figs. 2, 3, 4. 470. Dynamena Tamarisca, Flem. Brit. Anim. 543; Blainv. Man. Act. 483

a, e. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

b. Frith of Forth. Presented by G. Johnston, M.D.

8. SERTULARIA abietina.

Abies marina, Ger. Emac. 1574. fig.; Sibbald, Scot. Ill. lib. iv. 55; Merr. Pinn. 1.

Corallina marina, Raii Syn. 35. no. 12; Bast. Opusc. subs. 41.

t. 2. fig. 6, & t. 7. figs. 1-3, pessimæ.

Museus marinus, Plunk. Phytog. t. 48. fig. 5; Raii Hist. i. 78. Museus maritimus filicis folio, Morris, Plant. Hist. iii. 650. t. 9. fig. 1.

Sea Fir, Ellis, Corall. 4. no. 2. pl. 1. fig. b. B.

Sertularia abietina, Linn. Syst. 1307; Pall. Elench. 133; Mill. Zool. Dan. Prod. 255; Ellis and Soland. Zooph. 36; Esper, Pflanz. Sert. t. 1. figs. 1, 2; Lamk. Anim. s. Vert. ii. 116, ed. 2. ii. 141; Risso, PEurop. Mérid. v. 311; Lamx. Cor. Flex. 189; Johnst. Trans. Newc. Soc. ii. 256; Templeton, May. Nat. Hist. ix. 468; Hassall, Ann. & Mag. Nat. Hist. vi. 168; Couch, Zooph. Cornw. 9; Corn. Faun. 22; Johnst. Hist. Brit. Zooph. ed. 2. p. 75. t. 13. fig. 1, and p. 471; Dalyell, Anim. Scotl. i. 150. t. 23, 24, 25.

Dynamena abietina, Flem. Brit. Anim. 543.

La Sertulaire sapinette, Blainv. Act. 480, pl. 83. fig. 6. Sertularia abietinula, Dalyell, Anim. Scot. t. 7. f. 6.

a. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

b, c, f. Frith of Forth. Presented by G. Johnston, M.D.

d, e. Presented by G. Johnston, M.D.

g, h. Berwick Bay. Presented by G. Johnston, M.D.

i, k, l. Presented by G. Johnston, M.D.

 Dundee, W. Jackson, Esq. Presented by G. Johnston, M.D.

9. SERTULARIA filicula.

Sertularia filicula or Fern Coralline, Ellis and Soland. Zooph. 57. pl. 6. fig. c. C.; Turt, Brit, Faun. 215; Rees's Cyclop.

Vermes, pl. 8. fig. 1; Jameson, Wern. Mem. i. 564; Lamk. Anim. s. Vert. ii. 119; Lamx. Cor. Flex. 188; Johnst. Trans. Newe, Soc. ii. 257; Thomp. Ann. Nat. Hist. v. 250; Hassall, Ann. & Mag. Nat. Hist. vii. 284; Couch, Zooph. Cornw. 9; Corn. Faun. iii. 23; Jahnst. Hist. Brit. Zooph. ed. 2. p. 76. t. 14. fig. 1, and p. 471.

S. abietina B. Pull. Elench. 134.

Dynamena filicula, Flem. Brit. Anim. 544.

a. Frith of Forth. Presented by G. Johnston, M.D.

b, c, d, e, f, g, h, i, j, k, l, q. Berwick Bay. Presented by G. Johnston, M.D.

m. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

n, o, p. Presented by G. Johnston, M.D.

** Branches branched. DYNAMENA.

10. SERTULARIA operculata.

Museus marinus denticulatus, procumbens, caule tenuissimo, denticulis bijugis, Raii Hist. i. 79; Morrison, Hist. Plant. Oxon. iii. 650. t. 9. fig. 3; Plukenet, Phytog. t. 47. fig. 11.

Corallina muscosa, denticulata procumbens, Raii Syn. 36. no. 18.

Sea Hair, Ellis, Corall. S. no. 6. t. 3. fig. b. B.

Sertularia operculata, Linn. Syst. 1307; Ellis & Soland. Zooph. 39; Berk. Syn. i. 216; Esper, Pflanz. Sert. t. 4. figs. 1, 2; Lamk. Anim. s. Vert. ii. 118; Johnst. Trans. Newc. Soc. ii. 258, pl. 11. fig. 2; Templeton, ut supra cit. 468; Hassall, Ann. Nat. Hist. vi. 168; Couch. Zooph. Cornw. 9; Corn. Faun. iii. 23; Macgilliv. Ann. & Mag. Nat. Hist. ix. 464; Johnst. Hist. Brit. Zooph. p. 77. pl. 14. fig. 2, ed. 2. 471.

Sertularia usneoides, Pall. Elench. 132.

Dynamena operculata, Lamx. Bull. Soc. Phil. 1812, iii. 184; Cor. Flex. 176; Flem. Brit. Anim. 544; Blainv. Act. 483. pl. 83. fig. 5; Krauss, Corall. und Zoophyt. der Sudsee, 27. Dynamena pulchella, D'Orbigny.

a, b, e, f, g. Berwick Bay. Presented by G. Johnston, M.D.

c. Laneashire, J. R. Presented by G. Johnston, M.D.
d. Falmouth. Presented by G. Johnston, M.D.
e. In spirits. Presented by G. Johnston, M.D.

11. SERTULARIA argentea.

Sheep's-tailed Coralline, Corallina comis ad instar caudæ vulpinæ sparsis, Merr, Pinn. 29.

Corallina muscosa, alterna vice denticulata, ramulis in creberrima

capillamenta sparsis, Raii Syn. i. 36. no. 17.

Muscus marinus denticulatus minor ramulis in creberrima capillamenta sparsis, Plukenet, Phytog. t. 48. fig. 3, Muscus marinus minor denticulis alternis, Morris, Hist. Plant. Oxon. iii. 650. t. 9. fig. 4.

Squirrel's-tail, Ellis, Corall. 6. no. 4. pl. 2. fig. c. C.

Sertularia cupressina B, Linn. Syst. 1308.

S. cupressina, Esper, Pflanz. Sert. t. 3. figs. 1, 2.

argentca, Ellis and Soland. Zooph. 38; Berk. Syn. i. 216;
 Esper, Pflanz. Sert. t. 27. figs. 1, 2; Lamk. Anim. s. Vert. ü.
 117; Lamx. Cor. Flex. 192; Johnst. Trans. Newc. Soc. ii.
 258. pl. 11. fig. 4; Hassall, Ann. & Mag. Nat. Hist. vi. 168;
 Couch, Zooph. Cornw. 10; Corn. Faun. iii. 25; Johnst. Hist.
 Brit. Zooph. ed. 2. p. 79. t. 15. & t. 14. fig. 3, 3. 471.

Dynamena argentea, Flem. Brit. Anim. 544.

Plumularia argentea, Dalyell, Anim. Scotl. 189. t. 37, 38.

a. Ireland, J. Baird, Esq. Presented by G. Johnston, M.D.
 b. Scarborough. W. Bean, Esq. Presented by G. Johnston, M.D.

c. Berwick Bay. Presented by G. Johnston, M.D.

d, e, h. Presented by G. Johnston, M.D.

- Dundee, W. Jackson, Esq. Presented by G. Johnston, M.D.
- Dunstanborough, W. Embleton, Esq. Presented by G. Johnston, M.D.

12. SERTULARIA cupressina.

Sea Cypress, Ellis, Corall. 7. no. 5. pl. 3. fig. a. A.

Sertularia cupressina, Linn. Syst. 1308; Ellis and Soland. Zooph. 38; Berk. Syn. i. 216; Wern. Mem. i. 564; Lamk. Anim. s. Vert. ii. 118; Lamx. Cor. Flex. 192; Hogg's Stock. 32; Templeton, l. c. 468; Stark. Elem. ii. 440. pl. 8. fig. 12; Risso, l'Europ. Mérid. v. 311; Hassall, Ann. & Mag. Nat. Hist. vi. 168; Maegilliv. ibid. ix. 464; Couch, Zooph. Cornw. 11; Corn. Faun. iii. 26; Johnst. Hist. Brit. Zooph. ed. 2. p. 80. t. 16. 471.

Dynamena cupressina, Flem. Brit. Anim. 543.

a, c, d. Presented by G. Johnston, M.D.

 Cork, J. V. Thompson, Esq. Presented by G. Johnston, M.D.

e. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

4. NIGELLASTRUM.

Nigellastrum a, Oken, Lehrb. Nat. 93, 1815. Dynamena, sp. Lamz. 1812; Fleming, 1828; Blainv. 1830. Sertularia β , sp. Johnst. ton, M.D.

Devonshire, Mrs. Griffith. Presented by G. Johnston, M.D.

LLASTRUM pinnata.

a abietis forma, Bast. Opusc. Subs. i. 41. t. 1. fig. 6'(bad). ia pinnata, Pall. Elench. 136; Johnst. Hist. Brit. Zooph. p. 69. t. 12. figs. 3, 4.

scens, Turt. Gmel. iv. 677; Turt. Brit. Faun. 213; Cor. Flex. 195.

trum pinnatum, Oken, Lehrb. Nat. 93.

Torquay, Mrs. Griffith. Presented by G. Johnston, M.D. Torquay, Miss Griffith. Presented by G. Johnston, M.D.

LLASTRUM fusca.

Johnston, M.D.

ia nigra, Jameson, Wern. Mem. i. 565; Johnst. Brit. b. 128; Maogilliv. Ann. Nat. Hist. ix. 463. ma nigra, Flem. Brit. Anim. 545. ia fusca, Johnst. Hist. Brit. Zooph. ed. 2. p. 70, woodcut on p. 57, and fig. 11. 470. Dunstanborough, R. Embleton, Esq. Presented by G.

Doubtful Natives.

llaria cupressoides.
——? Frith of Forth, Jameson, Wern. Mem. i. 564. llaria elongata.

1. THUIARIA thuja.

Planta marina equiseti facie, Sib. Scot. Ill. ii. lib. iv. 55, t. 12. fig. 1. Fucus equiseti facie, Ibid. lib. i. 56; Raii Syn. 50. no. 47.

Bottle-brush Coralline, Ellis, Corall. 10. no. 9. pl. 5. fig. b. B. Sertularia thuja, Linn. Syst. 1308; Pall. Elench. 140; Ellis & Soland. Zooph. 41; Berk. Syn. i. 217; Esper, Pflanz. Sert. t. 22. figs. 1-3; Turt. Gmel. iv. 678; Wern. Mem. i. 564; Turt. Brit. Faun. 213; Stew. Elem. ü. 442; Lamw. Cor. Flex. 193; Hogg's Stock. 32; not O. Fabr. Faun. Grænl. 444.

Cellaria thuia, Lamk. Anim. s. Vert. ii. 339; Stark. Elem. ii. 439.

Nigellastrum thuja, Oken, Lehrb. Nat. 93.

Thuiaria thuiu, Flem. Brit. Anim. 545; Johnst. Trans. Newc. Soc. ii. 261; Couch, Zooph. Cornw. 11; Corn. Faun. iii. 27. pl. 5; Macgilliv. Ann. & Mag. Nat. Hist. ix. 464; W. Thompson, ibid. xiii. 440; Johnst. Hist. Brit. Zooph. ed. 2. p. 83. t. 17, 18, figs. 1, 2, 471.

Biseriaria thuia, Blainv. D. S. N. lx. 446; Actin. 482.pl. 81.fig.3.

a, b, c. Presented by G. Johnston, M.D.

d. River Tay. Presented by Capt. Ducane, R.A.

2. THUIARIA articulata.

Sea Spleenwort or Polypody, Ellis, Cor. 11. no. 10. pl. 6. fig. a. A. Sertularia articulata, Pall. Elench. 137; Esper, Pflanz. Sert. t. 8. figs. 1, 2.

Thuiaria articulata, Flem. Brit. Anim. 545; Hassall, Ann. Nat. Hist. vii. 284. pl. 7. figs. 1, 2; Couch. Zooph. Cornw. 12; Corn. Faun. iii. 28. pl. 4; Johnst. Hist. Brit. Zooph. ed. 2. p. 85. t. 18. figs. 3, 4, 471.

S. Lonchitis, Ellis and Solund, Zooph. 42.

S. Lichenastrum, Berk. Syn. i. 219; Turt. Brit. Faun. 216; Stew. Elem. ii. 447.

Nigellastrum articulatum, Oken, Lehrb, Nat, 93.

 Isle of Man, E. Forbes, Esq. Presented by G. Johnston, M.D.

b, c. Cornwall. Presented by G. Johnston, M.D.

d. Near Liverpool. Presented by G. Johnston, M.D. e, g. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

f. Berwick Bay. Presented by G. Johnston, M.D.

6. NEMERTESIA.

Nemertesia, Lamx. Cor. Flex. 163, 1812. Nigellastrum d. Oken, Lehrb. Nat. 93, 1815. Antennularia, Lamk. Hist. Anim. s. Vert. 1816; Blainv. 1830. Antennulaire, Lamk. 1812, no char.

1. NEMERTESIA anteunina.

Corallina astaci corniculorum æmula, Raii Syn. i. 34. no. 10.

Corallina affinis, non ramosa, Pluken. Almag. Bot. 119.

Muscus marinus s. coralloides non rumosus, crectus, Pluken. Phytog. t. 48, fig. 6.

Lobster's-horn Coralline or Sea-beard, Ellis, Corall. 15, no. 14. pl. 9. fig. a. A. B; Phil. Trans. xlviii. 630, t, 22, no. 3; Phil.

Trans. abridg. x. 491. pl. 12. fig. 3. C.

Sertularia antennina, Linn. Syst. 1310; Pall. Elench. 146; Ellis and Soland. Zooph. 45; Oliv. Zool. Adriat, 289; Berk. Syn. i. 217; Esper, Pflanz. Sert. t. 23. figs. 1-4; D. Chioje, Anim. s. Vert. Nap. iv. 144; Hogg's Stock. 33.

Nigellastrum antenninum, Oken, Lehrb. Nat. 93.

Nemertesia antennina, Lamx. Cor. Flex. 163; Dalyell, Anim.

Scotl. 198. t. 39, 40.

Antennularia antennina, Flem. Brit. Anim. 546; Johnst. Trans. Newc. Soc. ii. 260; Hassall, Ann. & Mag. Nat. Hist. vi. 168. pl. 5. fig. 3; Macgillin. ibid. ix. 464; Couch, Zooph. Cornw. 13; Corn. Faun. in. 29. pl. 7; Johnst. Hist. Brit. Zooph. ed. 2. p. 86. t. 19. figs. 1, 3. 471.

Ant. indivisa, Lamk. Anim. s. Vert. ii. 123, ed. 2. ii. 156; Templeton, Mag. N. H. ix. 468; Blainv. Act. 486. pl. 83. fig. 3. Plumularia verticillata, J. V. Thompson, MSS.

a. Dry on paper. Cork, J. V. Thompson, Esq. Presented by G. Johnston, M.D.

b. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

c, d, e, f. Devonshire, Mr. Griffith. Presented by G. Johnston, M.D.

g, h. Frith of Forth. Presented by G. Johnston, M.D. i. Mouth of the Tay, Dundee. Presented by G. John-

ston, M.D.

k, l. Presented by G. Johnston, M.D.

m, n. In spirits. Presented by G. Johnston, M.D.

2. NEMERTESIA ramosa.

Corallina ramosa cirris obsita, Raii Syn. 35. no. 11; Ellis, Corall. 16. pl. 9. b and c.

Sertularia antennina B, Linn. Syst. 1310.

Nemertesia ramosa, Lama. Cor. Flex. 164; Dalyell, Anim. Scott.

198. t. 39. figs. 7, 17. t. 40.

Antennularia ramosa, Lamk. Anim, s. Vert. ii. 123, ed. 2. ii. 156; Stark. Elem. ii. 440; Templeton, lib. cit. 468; Hassall, Ann. & Mag. Nat. Hist. vi. 168, pl. 5. figs. 1, 2; Johnst. Hist. Brit. Zooph. ed. 2. p. 88. t. 20. 464, 471.

Sertularia seticornis, Hogg's Stock, 33,

Antennularia arborescens, Hassall, Ann. Nat. Hist. xi. 111.
 A. antennina, var. Johnst. Brit. Zooph. ed. 1, 140. pl. 16. fig. 2;
 Couch, Corn. Faun. 29.

a, b, c, e. Dry. Devonshire, Mrs. Griffith. Presented by G. Johnston, M.D.

G. Johnston, M.D.

 Dry. Devonshire, Miss Griffith. Presented by G. Johnston, M.D.

f. Belfast Bay, W. Thompson, Esq. Presented by G. Johnston, M.D.

g, h. Presented by G. Johnston, M.D.

i. Ayrshire, Rev. D. Landsborough. Presented by G. Johnston, M.D.

7. AGLAOPHENIA.

Aglaophenia, Lamx. 1812, charact. Plumulaire, Lamk. 1812 (no char.).

Pennaria, sp. Oken, Lehrb. Nat. 94, 1815; Goldfuss, not Ehrenb. Plumularia, Lamk. 1816; Blainv. 1830.

* Stem a single tube. PLUMULARIA.

1. AGLAOPHENIA falcata.

Muscus marinus spiralis pennatus, Merr. Pinn. 81,

Corallina muscosa pennata, ramulis et capillamentis falcatis, Raii Svn. i. 36, no. 16.

Muscus pennatus, ramulis et capillamentis falcatis, Pluken. Phytog. t. 47. fig. 12.

Muscus maritimus pennatus, ramulis et capillamentis falcatis, Morris, Plant. Hist. Ox. iii. 650. t. 9. fig. 2.

Sickle Coralline, Ellis, Corall. 12. no. 11. pl. 7. fig. a. A. &

pl. 38. fig. 6. Corallina erecta pinnata, Bast. Opusc. Subs. 41. pl. 2. fig. 5, male. Sertularia falcata, Linn. Syst. 1309; Pall. Elench. 144; Ellis and Soland. Zooph. 42; Esper, Pflanz. Sert. t. 2. figs. 1, 2; Berk. Syn. i. 217; Blumenb. Man. 273.

Aglaophenia falcata, Lamx. Cor. Flex. 174.

Plumularia falcata, Lamk. Anim. s. Vert. ii. 125, ed. 2. ii. 160; Grant, Edinb. New Phil. Journ. i. 155; Flem. Brit. Anim. 546; Johnst. Trans. Newc. Soc. ii. 259; Hassall, Ann. and Mag. Nat. Hist. vi. 169; Couch, Zooph. Cornw. 14; Corn. Faun. iii. 130; Johnst. Hist. Brit. Zooph. p. 90. t. 21. figs. 1, 2. ed. 2. 471; Dalyell, Anim. Scotl. i. 176. t. 33.

Pennaria falcata, Oken, Lehrb. Nat. 94.

a, b, c, d, l, m, n, q. Berwick Bay. Presented by G. Johnston, M.D.

e, f, g. Frith of Forth. Presented by G. Johnston, M.D.

h. Cork, J. V. Thompson, Esq. Presented by G. Johnston. M.D.

i. i. Presented by G. Johnston, M.D.

k. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

o. Scarborough, W. Bean, Esq. Presented by G. Johnston,

p. The Tay, Dundee, W. Jackson, jun. Esq., with Notamia loriculata. Presented by G. Johnston, M.D. r. The Tay. Presented by Capt. Ducane, R.A.

2. AGLAOPHENIA pluma.

The podded Coralline, Ellis, Corall. 13. no. 12. pl. 7. fig. b. B. Sertularia pluma, Linn. Syst. 1309; Pall. Elench. 149; Ellis and Soland. Zooph. 43; D. Chiaje, Anim. s. Vert. Nap. iv. 145; Esper, Pflanz. Sert. t. 7. figs. 1, 2; Oliv. Zool. Adriat. 289; Lister, Phil. Trans. 1834, 369. pl. 8. fig. 2.

Aglaophenia pluma, Lumx. Bull. Soc. Phil. 1812, iii. 184; Cor. Flex. 170; Corall. 75; Krauss, Corall. und Zoophyt. der Sud-

see, 25.

Plumularia cristata, Lamk. Anim. s. Vert. ii. 125, ed. 2. ii. 161; Templeton, Mag. Nat. Hist. ix. 467; Risso, F Europ. Mérid. v. 313; Hassall, Ann. & Mag. Nat. Hist. vi. 169 & vii. 285; Couch, Zooph. Cornw. 15; Corn. Faun. iii. 31. pl. 8; Johnst. Hist. Brit. Zooph. ed. 2. p. 92. figs. 15, 16. t. 23. figs. 1-3. 471.

Pl. pluma, Flem. Brit. Anim. 546.

Sertolaria pluma, Cavol. Pol. Mar. 210. t. 8. figs. 5-7.

Pennaria pluma, Oken, Lehrb. Nat. 94. a. Presented by G. Johnston, M.D.

b, c. Ayrshire, P. W. Martin, Esq. Presented by G. Johnston, M.D.

d, f, g, k. Cornwall. Presented by G. Johnston, M.D. e. Ayrshire, P. W. Maclagan, M.D. Presented by G. John-

ston, M.D.

h. Cork, J. V. Thompson, Esq. Presented by G. Johnston, M.D.

j. Bangor, co. Down, W. Thompson, Esq. Presented by G. Johnston, M.D.

1. Var. Presented by G. Johnston, M.D.

m. Presented by G. Johnston, M.D.

3. AGLAOPHENIA Pennatula.

Sertularia Pennatula, Ellis and Soland. Zooph. 56. t. 7. figs. 1, 2; Flem. Edin. Phil. Journ. ii. 83.

Aglaophenia Pennatula, Lamx. Bull. Soc. Phil. 1812, iii. 184; Cor. Flex. 168; Krauss, Corall. und Zoophyt. der Sudsee, 25. Plumularia Pennatula, Lamk. Anim. s. Vert. ii. 128, ed. 2. ii. 165; Flem. Brit. Anim. 546; W. Thompson, Ann. Nat. Hist. v. 251; Couch, Zooph. Cornw. 16; Corn. Faun. iii. 33; Johnst. Hist. Brit. Zooph. ed. 2. p. 95. t. 22. figs. 1, 2.

a. Youghal, Miss M. Ball. Presented by G. Johnston, M.D.

b. Cornwall. Presented by G. Johnston, M.D.

c. J. E. Gray, Esq. Presented by G. Johnston, M.D.

4. AGLAOPHENIA pinnata.

Fucoides setis minimis indivisis constans, Raii Syn. i. 39. no. 7. t. 2. fig. 2. lit. a (injured and deprived of the pinna).

Sertularia pinnata, Linn. Syst. 1312; Ellis and Soland. Zooph.

46; Oliv. Zool. Adriat. 290.

Aglaophenia pinnata, Lamx. Cor. Flex. 172.

Plumolaria pinnata, Lamk. Anim. s. Vert. ii. 127, ed. 2. ii. 164; Risso, l'Europ. Mérid. v. 313; Johnst. Trans. Newc. Soc. ii. 260, and Mag. Nat. Hist. vi. 498; Hassall, Ann. & Mag. Nat. Hist. vii. 285; Macgilliv. ibid. ix. 464; Couch, Zooph. Cornw. 17; Corn. Faun. iii. 34; Johnst. Hist. Brit. Zooph. ed. 2. p. 96. t. 21. figs. 4, 5. 471; Dalyell, Anim. Scotl. 179. t. 34.

a. Dry, free. Presented by G. Johnston, M.D.

b. Dry, on paper. (Cork, J. V. Thompson?) Presented by G. Johnston, M.D.

c, d, e, f, g. Berwick Bay. Presented by G. Johnston, M.D. h. Cornwall, deep water. Presented by G. Johnston, M.D.

i. Norfolk, W. C. Peach, Esq. Presented by G. Johnston, M.D.

j. Zetland, E. Forbes, Esq. Presented by G. Johnston, M.D. k. Tynemouth, E. Forbes, Esq. Presented by G. John-

ston, M.D.

1. In spirits. Presented by G. Johnston, M.D.

5. AGLAOPHENIA setacea.

Sea Bristles, Ellis, Corall. 19. no. 16. pl. 11. fig. a, A.

Corallina setacea, Ellis, Corall. 38. fig. 4.

Sertularia pinnata β, Linn. Syst. 1312; D. Chiaje, Anim. s. Vert. Nap. iv. 144.

sefacea, Pall. Elench. 148; Ellis and Soland. Zooph. 47;
 Lister, Phil. Trans. 1834, 371. pl. 8. fig. 4.

Aglaophenia setacea, Lumx. Cor. Flex. 272.

Plumularia setacea, Lamk. Anim. s. Vert. ii. 129, ed. 2. ii. 165; Flem. Brit. Anim. 547; Templeton, Mag. Nat. Hist. ix. 467; Stark, Elem. ii. 440; Risso, V Europ. Mérid. v. 313; Hassall, Ann. & Mag. Nat. Hist. vii. 285; Couch, Zooph. Cornw. 16; Corn. Faun. iii. 33; Johnst. Hist. Brit. Zooph. ed. 2. p. 97. t. 22. figs. 3-5, 471.

Pennaria setacea, Oken, Lehrb. Nat. 94.

a, b. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

c. Mount's Bay, Cornwall, R. Q. Couch, Esq. Presented by G. Johnston, M.D.

d. - ? Presented by G. Johnston, M.D.

e. Glendore Bay, co. Cork, W. Thompson, Esq. Presented by G. Johnston, M.D.

6. AGLAOPHENIA echinulata.

Plumularia echinulata, Lamk. Anim. s. Vert. ii. 126, ed. 2. ii. 162; Blainv. Act. 477; Johnst. Hist. Brit. Zooph. ed. 2. p. 464. figs. 80, 81.

a, b, c. Fowey Harbour, Cornwall (R. Q. Couch, Esq.).

Presented by G. Johnston, M.D.

7. AGLAOPHENIA Catharina.

Plumularia Catharina, Johnst. Mag. Nat. Hist. vi. 498. figs. 61, 62; Hassall, Ann. & Mag. Nat. Hist. vii. 285; Macgilliv. ibid. ix. 465; Couch, Zoaph. Cornw. 18; Corn. Faun. iii. 35; Johnst. Hist. Brit. Zooph. ed. 2. p. 97. fig. 17, fig. 1 (page 3), p. 465, 471.

a, b, c, d, e. Berwick Bay. Presented by G. Johnston, M.D.

8. AGLAOPHENIA fascis.

Plumularia? fascis, Dalyell, Anim. Scotl. 186. t. 36. Inhab. Scotland, Dalyell.

** Stem composed of many parallel tubes. AGLAOPHENIA.

9. AGLAOPHENIA myriophyllum.

Corallina fruticosa pennata, Pétiv. Plant. Ital. t. 2. fig. 11.

Pheasant's-tail Corolline, Ellis, Corall. 14. no. 13. t. 8. fig. a, A. Sertularia myriophyllum, Linn. Syst. 1309; Pall. Elench. 153; Ellis and Soland. Zooph. 44; Berk. Syn. i. 217; Don's Pl. and Anim. of Forfar, 36; Esper, Pflanz. Sert. t. 5. figs. 1-3; Oliv. Zool. Adriat. 288; D. Chiaje, Anim. s. Vert. Nap. iv. 145. Aglaophenia myriophyllum, Lamx. Bull. Soc. Phil. 1812, iii. 184;

Aglaophenia myriophyllum, Lamx. Butt. Soc. Phi Cor. Flex. 168.

Plumularia myriophyllum, Lam. Anim. s. Vert. ii. 124, ed. 2. ii. 159; Flem. Brit. Anim. 547; Templeton, Mag. Nat. Hist. ix. 466; Stark, Elem. ii. 440; Risso, l'Europ. Mérid. v. 312; Blainv. Act. 477. pl. 83. fig. 4; Landsborough, Scott. Christ. Herald for April 1840, 244; Hassall, Ann. & Mag. Nat. Hist. vii. 285; Couch, Zooph. Cornw. 18; Corn. Faun. iii. 36. pl. 9; Johnst. Hist. Brit. Zooph. p. 99. t. 23. figs. 4, 5. p. 118. fig. 24. Pennaria myriophyllum, Oken, Lehrb. Nat. 94.

a, b, c. Cornwall. Presented by G. Johnston, M.D.

d. Zetland, E. Forbes, Esq. Presented by G. Johnston, M.D. e. Isle of Man, E. Forbes, Esq. Presented by G. Johnston, M.D.

f. Devonshire, "with capsules," Mrs. Griffith. Presented by G. Johnston, M.D.

g. Devon coast. Presented by G. Johnston, M.D.

10. AGLAOPHENIA frutescens.

Sertularia Gorgonia, Pall. Elench. 158.

S. frutescens, Ellis and Soland. Zooph. 55. pl. 6. fig. a, A. & pl. 9. figs. 1, 2, encrusted with a Gorgonia; Rees, Cyclop. Vermes, pl. 8. fig. 3; Turt. Brit. Faun. 214; Hogg's Stock. 33. Aglaophenia frutescens, Lamx. Cor. Flex. 173; Krauss, Corall.

und Zoophyt. der Sudsee, 26.

Plumularia frutescens, Flem. Brit. Anim. 547; Lamk. Anim. s. Vert. ed. 2. ii. 166; Blainv. Act. 477; Hassall, Ann. & Mag. Nat. Hist. vii. 285. pl. 8. fig. 1; Couch, Zooph. Cornw. 19; Corn. Faun. iii. 37; Johnst. Hist. Brit. Zooph. ed. 2. p. 100. t. 24. figs. 2, 3, 472.

Pennaria fruticans, Oken, Lehrb. Nat. 94.

a. Dry. Cullercoats, Northumberland, J. Alder, Esq. Presented by G. Johnston, M.D.

b. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

8. EPISTOMIA.

Epistomia, Flem. Brit. Anim. 541, 1828. Dynamena, sp. Lamx. 1816; Blainv. 1830.

Notamia, sp. Flem. 1828.

Gemicellaria, sp. Blainv. 1830. Sertularia, sp. Gmelin. Cellularia, sp. Pallas.

1. Epistomia Bursaria.

Shepherd's-purse Coralline, Ellis, Corall. 41. n. 8. t. 22. fig. a, A; Johnst, Brit. Zooph. ed. 2. 294.

Sertularia Bursaria, Linn. S. N. 1314; Berk. Syn. i. 219.

Cellularia Bursaria, Pall. Elench. 65; Ellis, Phil. Trans. lvii. 437. t. 19. fig. 12.

Cellaria Bursaria, Ellis & Soland. Zooph. 25; Lamk. Hist. Anim.

s. Vert. ed. 2. ii. 189. Dynamena Bursaria, Lamx. Cor. 179; Blainv. D. S. N. lx. 448. Notamia Bursaria, Flem. Brit. Anim. 541.

Gemicellaria Bursaria, Blainv. Dict. S. N. lx. 425; Man. Act. 461.

Sert. Bursa, Turt. Brit. Faun. 216. a, b, c. Dry, on Plumularia. Walton-on-the-Naze. Presented by G. Johnston, M.D.

Fam. CAMPANULARIADE.

Campanulariadæ, Johnst. in Trans. Berw. Club. p. 107; Gray. Syn. Brit. Mus. 76; Johnst. Hist. Brit. Zooph. ed. 2. p. 101. Les Campanulaires, Van Beneden, Mem. p. 11. Sertulariæ pars, Linn., Pall., Solander. Campanularia, Lamk. Anim. s. Vert. ü. 112. Sertularies pars, Lamx. Expos. Méthod. 9. Sertulariadæ, sect. ü. Flem. Brit. Anim. 538. Sertularia pars, Blainv. Act. 472.

1. LAOMEDEA.

Laomedea, Lamx. Bull. Soc. Phil. iii. 1812. Campanularia, sp. Lamk. Hist. Anim. s. Vert. ii. 1816. Monopyxis, Ehrenb. Corall. Roth. Meer. 73. Halecium β , Oken, Lehrb. Nat. 92, 1815. Sertularia β , Oken, Lehrb. Nat. 92, 1818.

* LAOMEDEA.

1. LAOMEDEA dichotoma.

Sea-thread Coralline, Ellis, Corall. 21. no. 18. pl. 12. fig. a. A. Corallina filiformis ramosa, pedunculis calyculorum contortis,

Ellis, Corall. pl. 38. fig. 3.

Sertularia dichotoma, Linn. Syst. x. 812; Linn. Syst. 1312; Ellis and Soland. Zooph. 48; Berk. Syn. i. 218; Jameson, Wern. Mem. i. 564; Turt. Brit. Faun. 215; Stew. Elem. ii. 446; D. Chiaje, Anim. s. Vert. Nap. iv. 146; Oliv. Zool. Adriat. 289.

Sertularia longissima, Pall. Elench. 119; Oken, Lehrb. Nat. 92.

Monopyxis longissima, Ehrenb. Corall. Roth. Meer. 73.

Laomedea dichotoma, Lamx. Bull. Soc. Phil. 1812, iii. 184; Cor. Flex. 207; Risso, l'Europ. Mérid. v. 314; Blainv. Act. 474; Couch, Zooph. Cornw. 20; Corn. Faun. iii. 37; Macgilliv. Ann. & May. Nat. Hist. ix. 465; Johnst. Hist. Brit. Zooph.

p. 102. t. 26. figs. 1, 2, ed. 2. 466. fig. 82. 472.

Campanularia dichotoma, Lamk. Anim. s. Vert. ii. 113, ed. 2. ii. 132; Flem. Brit. Anim. 548; Risso, P. Europ. Mérid. v. 309; Grant, Edinb. New Phil. Journ. i. 151; Grant. Cyclop. Anat. and Phys. i. 108. fig. 30; Grant, Comp. Anat. 10. fig. 5; Johnst. Trans. Newc. Soc. ii. 255; Stark, Elem. ii. 441; Templeton, Mag. Nat. Hist. ix. 469; Dalyell, Anim. Scotl. i. 212. t. 41.
Var. a. Polypidom dichotomously branched, diffuse.

Var. β. Polypidom slender and elongate, pyramidal, alternately

branched; the branches erecto-patent or spreading.

Var. y. Polypidom irregularly branched, the branchlets pinnate.

b. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

c. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

d. Berwick Bay. Presented by G. Johnston, M.D.

e, f. Devonshire, Mrs. Griffith. Presented by G. Johnston, M.D.

g, h. Fragment on paper and talc. Presented by G. Johnston, M.D.

 Devonshire, on tale, Mrs. Griffith. Presented by G. Johnston, M.D.

j, k, l. Berwick Bay. Large, dark. Presented by G. Johnston, M.D.

m, n. Southwold, four fathoms, May 1845. Presented by G. Johnston, M.D.

 Magilligan, co. Londonderry. Presented by G. Johnston, M.D.

** MONOPYXIS.

2. LAOMEDEA geniculata.

Fucoides setaceum tenuissime alatum, Raii Syn. i. 38. no. 6. pl. 2. fig. 2; Ellis, Phil. Trans. abridg. x. 491. pl. 12. fig. 1. a, A. Knotted-thread Coralline, Ellis, Corall. 22. no. 19. pl. 12. b, B.

Sertularia geniculata, Linn. Syst. 1312; Pall. Elench. 117; Müll. Zool. Dan. iii. 61. t. 117. figs. 1-4; Ellis and Soland. Zooph. 49; Lam. Anim. s. Vert. ii. 120, ed. 2. ii. 149; D. Chiaje, Anim. s. Vert. Nap. iv. 143.

Laomedea geniculata, Lamx. Cor. Flex. 208; Couch, Zooph. Cornw. 20; Corn. Faun. 38. pl. 10. fig. 1; Johnst. Hist. Brit. Zooph. ed. 2. p. 103. t. 25. figs. 1, 2. 472.

Campanularia geniculata, Flem. Brit. Anim. 548; Johnst. Trans.
 Newe. Soc. ii. 255; Van Beneden, Camp. 34. pl. 3. figs. 1-6.
 Monopyxis geniculata, Ehrenb. Corall. des Roth. Meer. 73.

 Ayrshire, Rev. D. Landsborough. Presented by G. Johnston, M.D.

 Ayrshire, P. W. Martin, Esq. Presented by G. Johnston, M.D.

c. Carrickfergus near Belfast, W. Thompson, Esq. Presented by G. Johnston, M.D.

d. Presented by G. Johnston, M.D.

e, f, g. On Fucus with Flustra membranacea, Berwick Bay. Presented by G. Johnston, M.D.

h. Ayrshire, P. W. Maclagan, M.D. Presented by G. Johnston, M.D. 3. LAOMEDEA gelatinosa.

Var. a. Stem a single tube, subramose.

Var. B. Stem compound, ramose, Johnst. B. Z. pl. 27. fig. 1. Corallina confervoides gelatinosa alba, geniculis crassiusculis pel-

Incidis, Raii Syn. i. 34. no. 7.

Corallina filiformis ramosa pedunculis calyculorum contortis, Ellis, Corall. pl. 38. fig. 3. & p. 23. pl. 12. fig. c, C.

Sertularia gelatinosa, Pall. Elench. 116; Stew. Elem. vi. 444.

Halecium gelatinosa, Oken, Lehrb. Nat. 92.

Laomedea gelatinosa, Lamx. Corall. 92; Thompson, Ann. Nat. Hist. v. 251; Hassall, ibid. vi. 169; Couch, Zooph. Cornw. 21; Corn. Faun. iii. 39, pl. 10. fig. 2; Johnst. Hist. Brit. Zooph. p. 105. t. 25. figs. 3, 4, ed. 2. 472.

Campanularia gelatinosa, Johnst. Trans. Newc. Soc. ii. 254; Van

Beneden, Campan. 33. pl. 1, 2.

Sertularia dichotoma, in part, Lister, Phil. Trans. 1834, 372, 375. pl. 10. fig. 1.

La Sertolara dicotoma, Cavol. Pol. Mar. 194. 1. 7. figs. 5-8.

a. Dublin. Presented by G. Johnston, M.D.

 Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

c. In spirits. Presented by G. Johnston, M.D.

4. LAOMEDEA Flemingii.

Campanularia Flemingii, Milne Edwards.

Sertularia gelatinosa, Flem. Edinb. Phil. Journ. ii. 84; Phil.

Zool. ii. 616. t. 5. fig. 3.

Campanularia gelatinosa, Flem. Brit. Anim. 549, Laomedea gelatinosa, Johnst. Brit. Zooph. explan. plates, t. 25. Inhab.

5. LAOMEDEA obliqua.

Laomedea obliqua, Saunders in litt. 5. Jan. 1841; Johnst. Hist. Brit. Zooph. ed. 2. p. 106. t. 28. fig. 1.

Campanularia, Lister, Phil. Trans. 1834, 372. pl. 8. fig. 5.
a. Brighton, 1838, W. W. Saunders, Esq. Presented by G. Johnston, M.D.

2. CAPBULARIA.

Capsularia, Cuvier. Tab. Elem. 665, 1798.

Campanularia, Lamk. Hist. 1816.

Campanulaire, Lamk. Ext. du Cour. 1812 (no charact.).

Laomedea, sp. Blainv. Lafea, Lamx. Exp. Méth.

Clytea, Lamx. 1812 (charact.).

Halecium B, sp. Oken, Lehrb. Nat. 92, 1815. Sertularia B, Oken, Lehrb. Nat. 92, 1815.

* CAMPANULARIA.

1. CAPSULARIA volubilis.

Small climbing Coralline with bell-shaped cups, Ellis, Corall. 24. no. 21. pl. 14. fig. a, A; Phil. Trans. xlviii. 629. pl. 22. no. 2; Phil. Trans. abridg. x. 491. pl. 12. fig. 2. B.

Polyporum species, Bast. Opusc. Subs. i. p. 41. t. 2. fig. 1 a. &

fig. 7 b.

Sertularia volubilis, Linn. Syst. 1311; Ellis and Soland. Zooph. 51. pl. 4. figs. e, f, E, F; copied into Kirby's Bridgw. Treat. i. pl. 2. fig. 2; Berk. Syn. i. 218; Oken, Lehrb. Nat. 92; Fabr. Faun. Granl. 444; Esper, Pflanz. Sert. t. 30, figs. 1, 2; Turt. Brit. Fann. 214; Stew. Elem. ii. 444.

S. uniflora, Pall. Elench. 121; Ellis, Phil. Trans. lvii. 437. pl. 19.

fig. 9.

Clytia volubilis, Lamx. Bull. Soc. Phil. 1812, iii. 184; Cor. Flex.

202; Expos. Méth. 13. pl. 4. figs. e, F.

Campanularia volubilis, Lamk. Anim. s. Vert. ii. 113, ed. 2. ii. 132; Flem. Brit. Anim. 548; Risso, l'Europ. Mérid. v. 309; Johnst. Trans. Newc. Soc. ii. 255; Templeton, Mag. Nat. Hist. ix. 466; Couch, Zooph. Cornw. 22; Corn. Faun. 40. pl. 11. fig. 1; Van Beneden, Campan. 36. pl. 3. figs. 7, 8; Blainv. Act. 472. pl. 84. fig. 2; Johnst. Hist. Brit. Zooph. p. 108. fig. 18, ed. 2, 472.

a. Berwick Bay. Presented by G. Johnston, M.D.

b. On Plumularia falcata. Torquay, Mrs. Griffith, Oct. 1846. Presented by G. Johnston, M.D. c. Donaghadee, Sept. 1840. G. Hyndman, Esq. Presented

by G. Johnston, M.D. d. With vesicles. Goran, 30th Nov. 1844. Presented by G. Johnston, M.D.

e, f. In spirits. Presented by G. Johnston, M.D.

2. Capsularia integra.

Campanularia integra, Macgilliv. Ann. & Mag. Nat. Hist. ix. 465; Johnst. Hist, Brit. Zooph. ed. 2, 109, t. 28, fig. 2.

Camp. lavis?, Couch, Corn. Faun. 42.

a. Hastings. W. W. Saunders, Esq., 1840. Presented by G. Johnston, M.D.

3. Capsularia Syringa.

Creeping Bell-Coralline, Ellis, Corall. 25. pl. 14. fig. b, B. Sertularia Syringa, Linn. Syst. 1311; Oken, Lehrb. Nat. 92: Berk. Syn. 1. 218.

S. volubilis, Pall. Elench, 122,

S. repens, Ellis and Soland. Zooph. 52.

Clytia Syringa, Lams. Bull. Soc. Phil. 1812, iii. 185; Cor. Fles. 203.

Campanularia Syringa, Lamk. Anim. s. Vert. 113, ed. 2. ii. 132; Flem. Brit. Anim. 548; Johnst. Trans. Newc. Soc. ii. 256; Thompson, Ann. Nat. Hist. v. 251; Macgilliv. Ann. & Mag. Nat. Hist. ix. 465; Couch, Zooph. Cornw. 22; Corn. Fann. 41. pl. 11. fig. 2; Hassall, Ann. & Mag. Nat. Hist. vi. 169; Van Beneden, Camp. 37. pl. 3. fig. 9 (opt.); Johnst. Hist. Brit. Zooph. ed. 2. p. 110. fig. 19. 472.

a, b. Presented by G. Johnston, M.D.

4. Capsularia lacerata.

Campanularia lacerata, Johnst. Hist. Brit. Zooph. ed. 2. pl. 28. fig. 3. p. 111.

s. On Plumularia falcata. Berwick Bay. Presented by

G. Johnston, M.D.

5. CAPSULARIA lævis.

Campanularia lævis, Couch, Corn. Faun. iii. 42. Inhab. Polperro, Couch.

** CLYTIA.

6. CAPSULARIA verticillata,

Horse-tail Coralline with bell-shaped cups, Ellis, Corall. 23. no. 20. pl. 13. fig. a, A.

Sertularia verticillata, Linn. Syst. 1310; Pall. Elench. 115; Ellis and Soland. Zooph. 50; Berk. Syn. i. 218; Hogg's Stock. 34.

Clytia verticillata, Lamx. Bull. Soc. Phil. 1812, iii. 184; Cor. Flex. 202.

Halecium verticillata, Oken, Lehrb. Nat. 92.

Campanularia verticillata, Lamk. Anim. s. Vert. ii. 113, ed. 2. ii. 131; Flem. Brit. Anim. 550; Templeton, Mag. Nat. Hist. ix. 466; Couch, Zooph. Cornw. 23; Corn. Faun. iii. 42. pl. 11. fig. 4; Hassall, Ann. & Mag. Nat. Hist. vi. 169; Johnst. Hist. Brit. Zooph. ed. 2. p. 112. t. 26. figs. 3, 4. 472; Dalyell, Anim. Scotl. 1. 218. t. 42.

La Laomédée verticillée, Blainv. Act. 475. pl. 84. fig. 3.

a. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

b. In spirits. Presented by G. Johnston, M.D.

*** LAFEA, Lamx.

7. CAPSULARIA dumosa.

Corallina astaci corniculorum æmuli, Petiv. Plant. Ital. pl. 2. fig. 10.

Sertularia volubilis \$\beta\$, Pall. Elench. 123.

Sertularia dumosa, Flem. Edinb. Phil. Journ. ii. 83.

Tubularia tubifera, Johnst. Edinb. Phil. Journ. xiii. 222. pl. 3. figs. 2, 3.

Lafen cornuta, Lamx.; Soland. Zooph. 5. pl. 65. figs. 12, 14.
Campanularia dumosa, Flem. Brit. Anim. 548; Johnst. Trans.
Newc. Soc. ii. 254. pl. 11. fig. 1; Couch, Corn. Faun. iii. 42;
Reid, Ann. & Mag. Nat. Hist. xvi. 393; Johnst. Hist. Brit.
Zooph. ed. 2. p. 113. figs. 20-22. t. 27. figs. 2-5. 472; Dalyell,
Anim. Scotl. i. 221. t. 46. f. 22, 23.

Cornularia dumosa, Couch, Zooph. Cornw. 39.

Cornularia rugosa, Gray, Ann. Nat. Hist. i. 238; not Cavolini. Siphytus obconicus, Rafinesq. Caratt. (1810), 96. t. 20. fig. 82

a, b, c, d, e. Berwick Bay. Presented by G. Johnston, M.D.

f. - ? Presented by G. Johnston, M.D.

g. On Flustra. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

 h. On fragments of sea-weed. Presented by G. Johnston, M.D.

 Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

3. CONCHELLA.

Campanularia, sp. Couch, Corn. Faun. 41, 1844; Dalyell, Anim. Scotl. 224.

1. CONCHELLA intertexta.

Campanularia intertexta, Couch, Corn. Faun. iii. 41. t. 11. fig. 3;

Johnst. Hist. Brit. Zooph. ed. 2. p. 109.

Sertularia Campanularia arcta, Dalyell, Anim. Scotl. 224, t. 42. a, b, c. On Sertularia. Zetland. Presented by G. Johnston, M.D.

Doubtful Species.

CYMODOCE, Lamx. 1816; Blainv. 1830.

1. Cymodoce simplex.

Cymodoce simplex, Lamx. Cor. Flex. 216. pl. 7. fig. 2; Blainv. Act. 487. pl. 81. fig. 4; Johnst. Hist. Brit. Zooph. ed. 2. p. 116. Laomeden geniculata (injured), Couch, Corn. Faun. 43.

a. "English coast, from M. Lamouroux's collection." Leach.

2. CYMODOCE comata.

Cymodoce comata, Lamx. Exp. Méth. 15. pl. 67. figs. 12, 13; Johnst. Hist. Brit. Zooph. ed. 2. p. 117.

Cymodocia comata, Flem. Brit. Anim. 551.

Inhab. "Devonshire, W. E. Leach." Lamouroux.

? Order IV. HYDRINA.

Hydrina, Johnst. Hist. Brit. Zooph. ed. 2. p. 120.

Fam. HYDRAIDÆ.

Genus Hydra, Linn. Syst. 1320; Pall. Elench. 25; Ellis and Soland. 8; Lamk. Anim. s. Vert. ii. 57; Blainv. Act. 494; Flem. Brit. Anim. 553.

Les Polypes à bras, Cuv. Règ. Anim. iii. 294.

Hydrina pars, Ehrenb. Corall. des Roth. Meer. 67.

Hydroidæ, Johnst. Trans. Berw. Club. p. 107.

Hydraidæ, Gray, Syn. Brit. Mus. 76; Johnst. Hist. Brit. Zooph. ed. 2. p. 120; Couch, Corn. Faun. 136.

Polypes nues (P. nuda), Blainv. Dict. Sci. Nat. 1830.

1. HYDRA.

Hydra, Linn. &c.

I. HYDRA viridis.

Polypes verds, Trembley, Mem. 22. pl. 1. fig. 1, pl. 3. figs. 1-10. Freshwater Polypus, Trembley, Phil. Trans. abridg. viii. 623;

Folkes, ibid. 676. pl. 17, & pl. 18. figs. 1-3.

Hydra viridis, Linn. Faun. Suec. 367. no. 1283; Linn. Syst. 1320; Müll. Verm. 1, 11, 13; Zool. Dan. Prod. 230. no. 2783; Encyclop. Méthod. Vers., pl. 66. figs. 1–8; Berk. Syn. 1, 221; Ure's Ruthberg. 232; Turt. Gmel. iv. 691; Turt. Brit. Faun. 218; Lam. Anim. s. Vert. ii. 60; Stew. Elem. ii. 452. pl. 12. figs. 4, 5; Rees's Cyclop. Vermes., pl. 5. fig. 1; Blumenb. Man. 275. pl. 1. fig. 10; Bosc, Vers, ii. 274; Stark, Elem. ii. 443; Woodward, Mag. Nat. Hist. iii. 349. fig. 89; Roget, Bridgw. Treat. i. 162. figs. 59, & 176–8. figs. 73–76; Adams on the Microscope, 399. pl. 21. fig. 5; Carus, Comp. Anat. t. 1. fig. 1; Ehrenb. Corall. des Roth. Meer. 67; Landsborough, Scott. Christ. Herald, n. s. i. 726; Thompson, Ann. & Mag. Nat. Hist. vii. 481; Johnst. Hist. Brit. Zooph. ed. 2. p. 121. fig. 28. H. viridissima, Pall. Elench. 31.

Third sort of Polype, Baker, Polyp. 19 c. fig.

De Groene Polyp met veale armen, Rosel, Hist. der Insect. iii. t. SS, S9.

Le Polype vert, Cuv. Règ. Anim. iii. 295. L'Hydre verte, Blainv. Act. 494. pl. 85. fig. 1. Inhab.

2. Hydra vulgaris.

Polypes de la seconde espèce, Tremb. Mem. pl. 1. figs. 2, 5; pl. 2. fig. 2; pl. 6. figs. 2, 8; pl. 8. figs. 1, 7; pl. 10. figs. 1-7; pl. 11, 12, 13. figs. omn. partly copied in Adams's Micros. 399. pl. 21. fig. 6; Rosel, Hist. der Insect. iii.; Polyp. t. 78-83; Ehrenb. Corall. des Roth. Meer. 68.

Hydra vulgaris, Pall. Elench. 30; Ellis, Phil. Trans. lvii. 430; Ellis and Soland. Zooph. 9; Encyclop. Méthod. Vers, pl. 67; Rees's Cyclop. Vermes, pl. 5. fig. 2; Johnst. Hist. Brit. Zooph.

ed. 2. p. 122. t. 29. fig. 2. 473.

H. grisea, Linn. Syst. 1320; Müll. Verm. 1. ii. 14; Couch, Corn. Faun. iii. 136; Ure's Ruthberg. 233; Berk. Syn. i. 222; Blumenb. Man. 295; Lamk. Anim. s. Vert. ii. 60; Templeton, Mag. Nat. Hist, ix. 418.

H. brunnea, Templeton, loc. cit. 417. fig. 56. First sort of Polype, Baker, Polyp. 17 c. fig.

Polypes d'eau douce, M. Edwards, Elem. de Zool. 10. fig. 1. Inhab.

3. HYDRA attenuata.

Hydra attenuata, Rosel, Ins. iii.; Polyp. t. 76, 77; Pall. Elench. 32; Ehrenb. Corall. des Roth. Meer. 68; Johnst. Hist. Brit. Zooph. ed. 2. p. 123. t. 29. fig. 1.

H. pallens, Turt. Gmel. iv. 692; Lamk. An. s. Vert. ed. 2. ii. 71. Inhab.

4. HYDRA Oligactis.

Polypes à long bras, Tremb. Mem. pl. 1. figs. 3, 4, 6; pl. 2. figs. 1, 3, 4; pl. 3. fig. 11; pl. 5. figs. 1-4; pl. 6. figs. 3-7, 9, 10; pl. 8. fig. 8, 11; pl. 9, copied in Adams's Micros. 399. pl. 21. fig. 7, 8, pl. 23. A. B., pl. 24. A. B. fig. omnes; Rosel, Hist. der Insect. Polyp. iii. pl. 84, 87; Cuv. Règ. Anim. iii. 295.

Long-armed Freshwater Polype, Ellis, Corall. xvi. pl. 28. fig. C. (the tentacula shortened).

Second sort of Polype, Baker, Polyp. 18 c. fig.

Hydra Oligactis, Pall. Elench. 29; Ehrenb. Corall. des Roth. Meer. 68; Johnst. Hist. B. Z. ed. 2. p. 124. fig. 27. p. 120.

H. fusea, Linn. Syst. 1320; Encyclop. Méthod. Vers, pl. 69.
figs. 1-9; Rees's Cyclop. Vermes, pl. 5. fig. 3; Ellis & Soland.
Zooph. 9; Blumenb. Man. 275; Lam. Anim. s. Vert. ii. 60.
Hydra verrucosa, Templeton, Mag. Nat. Hist. ix. 418. fig. 57;

Allman, Ann. Nat. Hist. xiii. 328.

Inhab.

Class V. POLYZOA.

Polyzoa, J. V. Thompson, Zool. Research. Mem. v. 92; J. E. Gray, Syn. Brit. Mus. 133; Johnst. Hist. Brit. Zooph. ed 2. p. 253.

Bryozoa, Ehrenberg, Corall. des Roth. Meer. 153; Jones, Anim.

Kingd. 107, 117; Owen, Lect. 93, 101.

Molluscan Zoophytes s. Zoophyta Ascidioida, Johnst. Mag. Zool. & Bot. i. 448; Couch, Corn. Faun. iii. 84.

Les Bryozonrides, Audouin and Milne Edwards, Lam. Anim. s.

Vert. ed. 2. ii. 104.

Ciliobrachiata, Farre, Phil. Trans. 1837. Polypes tuniciens, M. Edwards, Mem. 16.

Polypiaria pars, Blainv. Diet. Sci. Nat. 1830, Ix. 364.

Order I. CARNOSA.

Polyzon carnosa, J. E. Gray, Syn. Brit. Mus. 135 (1842).

Fam. 1. ALCYONIDIADE.

Aleyoniadæ, Johnst. Trans. Berw. Nat. Club. i. 108 (1836). Aleyonidulæ, Johnst. Hist. Brit. Zooph. 300. Haleyonellea, Johnst. Hist. Brit. Zooph. ed. 2. p. 358. Aleyonidiadæ, Gray, Syn. Brit. Mus. 1842, 135.

1. ALCYONIDIUM.

Alcyonidium, Lamx, Gen. Thalas. 71, 1813; Exp. Méth. 71, 1821; Gray, Brit. Pl. i. 353; Johnst. Hist. Brit. Zooph. ed. 1. 300, ed. 2. 350; Couch, Corn. Faun. iii, 132.

Alcyonium, Flem. Brit. An. 1828,517; Blainv. 1830 (not Lamx.). Alcyonium, sp. Pallas; Ellis.

Halodactylus, Farre, Phil. Trans. 1837; Van Beneden.

Fucus, sp. Ray.

Ulva, sp. Hudson.
Egg of a naked Gasteropodous Mollusca, D'Orb. Mém. Mus. vi.

Epipetrum, Oken, Lehrb. Nat. 80, 1815.

1. ALCYONIDIUM gelatinosum.

Fucus spongiosus nodosus, Ger. Herb. Emac. 1570. no. 10. fig.; Raii Syn. i. 49. no. 42.

Aleyonium, seu Fueus nodosus et spongiosus, Ellis, Corall. 87. no. 5. pl. 32. fig. d, D.

Alcyonium ramosum molle, multis polypis obsessum, Bast. Opusc.

Subs. i. 40. t. 1. fig. 5. A, B.

Aleyonium gelatinosum, Pall. Elench. 353; Linn. Syst. 1295; Oliv. Zool. Adriat. 240; Esper, Pflanz. t. 18. A. figs. 1, 2; Müll. Zool. Dan. Prod. 255; Zool. Dan. iv. 30. t. 147; Ellis and Soland. Zooph. 176; Jameson, Wern. Mem. i. 563; Stew. Elem. ü. 432; Flem. Brit. Anim. 517; Lamx. Cor. Flex. 350; Blainv. Dict. Sc. Nat. lx. 488; Act. 525. pl. 92. fig. 1.

Ulva diaphana, Eng. Bot. pl. 263; With Bot. Arrang. iv. 121; Hull. Brit. Fl. ii. 312; Lam. and Decand. Flor. Franc. ii. 6.

Epipetrum gelatinosum, Oken, Lehrb. Nat. 80, 1815.

Aleyonidium diaphanum, Lamx. Gen. Thalas. 71. t. 7. fig. 4; Expos. Méth. 71; Gray, Brit. Pl. i. 353; Hook. Fl. Scot. ii. 75; Loud. Encyclop. Pl. 928. no. 15045; Couch, Corn. Faun. iii. 133.

Al. flavescens, Loud. Encyclop. Pl. 928. no. 15046.

Halodaetylus diaphanus, Farre, Phil. Trans. 1837, 405. pl. 25,

26; Van Beneden, Recherch. 60. pl. 8. fig. 12.

Aleyonidium gelatinosum, Johnst. Brit. Zooph. 300. pl. 41. figs. 1-3; Couch, Corn. Faun. 132; W. Thompson, Ann. Nat. Hist. v. 253; Hassall, Ann. & Mag. Nat. Hist. vii. 370; Johnst. Hist. Brit. Zooph. ed. 2. p. 358. t. 68. figs. 1-3.

a. In spirits. Ireland, W. Thompson, Esq. Presented by

G. Johnston, M.D.

b, c. In spirits. W. E. Leach, M.D.

2. ALCYONIDIUM hirsutum.

Alcyonium gelatinosum, Fabr. Faun. Grænl. 447; Esper, Pflanz.

Aleyon. t. 18. fig. 1.

A. hirsutum, Flem. Brit. Anim. 517; Johnston, Zool. Journ. iv. 418, & Trans. Newc. Soc. ii. 251. pl. 9. fig. 1; Blainv. Dict. Sci. Nat. 1x. 488.

Aleyonidium hirsutum, Johnst. Brit. Zooph. 303. pl. 42. figs. 1, 2;
 Hassall, Ann. & Mag. Nat. Hist. vii. 370. pl. 10. figs. 3, 4;
 Couch, Corn. Faun. iii. 133; Johnst. Hist. Brit. Zooph. ed. 2.
 p. 361. t. 69. figs. 1, 2.

Halodactylus hirsutus, Van Bened. Recherch. 61. pl. 8. figs. 3-8.
a. Dry, on paper. Berwick Bay. Presented by G. John-

ston, M.D.

3. ALCYONIDIUM parasiticum.

Aleyonium parasiticum, Flem. Brit. Anim. 518; Blainv. Dict. Sci. Nat. lx. 488.

Aleyonidium parasiticum, Johnst. Brit. Zooph. 304. pl. 41. figs. 4, 5; Couch, Corn. Faun. iii. 134; Hassall, Ann. & Mag. Nat. Hist. vii. 370; Reid, Ann. & Mag. Nat. Hist. xvi. 393; Johnst. Hist. Brit. Zooph. ed. 2. p. 362. t. 68. figs. 4, 5.

Halodactylus parasiticus, Van Beneden, Recherch. 62. pl. 8. figs. 9-12.

a. Dry, on Plumularia foliata. Frith of Forth. Presented by G. Johnston, M.D.

b. On Thoa halecina. Presented by G. Johnston, M.D.

2. Pulmonellum.

Pulmonellum, Blainv. Dict. Sci. Nat. lx. (1830), 489. Aleyonium, sp. Ellis, Cor. 82; Pallas, Zooph. 356; Oken, Lehrb. Nat. 82, 1815. Maxina, sp. Oken, Lehrb. Nat. (1815), 84.

l. Pulmonellum Ficus.

Alcyonium pulmonis instar lobatum, Ellis, Corall. 82. t. 17. B. Alcyonium Ficus, Pallas, Zooph. 356; not Esper. Pulmonellum Ficus, Blainv. Dict. Sci. Nat. lx. (1830); Man. Act. 526. t. 92. f. 3, cop. Ellis.

Mazina pulmoniforme, Oken, Lehrb. Nat. 84. Inhab. Kent, Ellis.

3. CYCLOUM.

Cycloum, Hassall, Ann. & Mag. Nat. Hist. vii. 433; Johnst. Brit. Zooph. ed. 2. 364, 1847.

l. CYCLOUM papillosum.

ston, M.D.

Cycloum papillosum, Hassall, Ann. & Mag. Nat. Hist. vii. 483; Johnst. Hist. Brit. Zooph. ed. 2. p. 364. t. 70. a, b, c, d. Dry, on Fucus serratus. Presented by G. John-

4. SARCOCHITUM.

Sarcochitum, Hassall, Ann. & Mag. Nat. Hist. vii. 434; Johnst. Hist. Brit. Zooph. ed. 2. 466, 1847.

1. SARCOCHITUM polyoum.

Sarcochitum polyoum, Johnst. Hist. Brit. Zooph. ed. 2. p. 366. t. 71; Hassall, Ann. & Mag. Nat. Hist. vii. 434.

a, b. Dry, on Fucus serratus. Presented by G. Johnston, M.D.

Fam. 2. PEDICELLINIDAS.

Polypiaria pedicellinea, P. Gervais, Ann. des Sci. Nat. vii. (1837), 80.

Pedicellinæ, Johnst. Hist. Brit. Zooph. ed. 2. p. 381.

1. PRDICELLINA.

Pedicellina, Sars, Besk. 4, 1835; Van Beneden, Nouv. Mem. Acad. Brux. xix. 47. t. 12.

Cardua, Hassall, MSS.

Crinomorpha, Van Beneden, MSS. 1837.

Lusia, Milne Edwards in Lamk. Hist. Anim. s. Vert, ed. 2. ii. 72, 1836.

Hydra, sp. Bosc.

Hydra B, Flem. Brit. Anim. 1828.

1. PEDICELLINA echinata.

Fleshy Polypes of a red colour and a particular kind, Ellis, Corall.

pl. 38. fig. 5. E, F.

Hydra coronata, Flem. Brit. Anim. 554; Lister, Phil. Trans. 1834, p. 385, pl. 12. fig. 6; Sharpey, Cyclop. Anat. & Phys. i. p. 610, fig. 293.

Pedicellina echinata, Sars, Besk. 5. pl. 1. fig. 1; Hassall, Ann. & Mag. Nat. Hist. vii. 365; W. Thompson, ibid. xiii. 440; Ann. Nat. Hist. xv. 312. pl. 20. fig. 5; J. Reid, ibid. xvi. 390; Johnst. Hist. Brit. Zooph. ed. 2. p. 382. t. 70. fig. 5; Van Beneden, Nouv. Mém. Acad. Brux. xix. 47. t. 1, 2.

? Hydra lutea, Bosc, H. N. Vers, ii. 236. t. 22. fig. 2; Lamk. Hist.

ed. 2. ii. 60.

Lusia, M. Edwards in Lamk. Hist. ed. 2. ii. 72.

a, b. In spirits. Presented by G. Johnston, M.D.

 In spirits with Eucratea chelata. Presented by G. Johnston, M.D.

Note.—"Forbesia, H. D. S. Goodsir, Ann. & Mag. Nat. Hist. xv. 380. t. 20. fig. 4, is the skin of a worm."—Dr. Melville.

Order II. CORNEA.

Polyzoa cornea, J. E. Gray, Syn. Brit. Mus. 135.

Fam. 1. VESICULARIADÆ.

Vesiculariadæ, Gray, Syn. Brit. Mus. 1842, 135. Vesicularina, Johnst. Hist. Brit. Zooph. ed. 2. p. 367.

1. AMATHIA.

Amathia, Lamx. Bull. Soc. Philom. iii. 184, 1812 (Sert. lendigera). Serialaria, Lamk. 1812 (no char.), 1816; Blainv. 1830, 1834. Sertularia, sp. Pallas.

Pennaria (type), Oken, Lehrb. Nat. 93, 1815.

AMATHIA lendigera:

Fucoides lendigerum espillamentis Cuscutse instar implexis, Rais Syn. 38. no. 3.

Nit Coralline, Ellis, Corall. 27. no. 24. pl. 15. fig. b, B.

Sertularia lendigera, Lian. Syst. 1311; Pall. Elench. 124; Ellis and Soland. Zooph. 52; Oliv. Zool. Adriat. 289; Esper, Pfans. Sert. t. 9. figs. 1, 2; Turt. Gmel. iv. 682; Berk. Syn. i. 218; Stew. Elem. ii. 445; Wern. Mem. i. 564; Turt. Brit. Faun. 215; Bosc, Vers, iii. 117; Hogg's Stock. 33; Lister, Phil. Trans. 1834, 384.

La Sertolara lendinosa, Cavol. Polip. Mar. 229. t. 9. figs. 1, 2;

D. Chiaje, Anim. s. Vert. Nap. iv. 146.

Serialaria lendigera, Lamk. Anim. s. Vert. ii. 130, ed. 2. ii. 169; Risso, F. Europ. Mérid. v. 315; Flem. Brit. Anim. 547; Stark. Elem. ii. 439; Templeton, Mag. Nat. Hist. ix. 467; Couch, Zooph. Cormu. 37; Corn. Faun. iii. 94. pl. 16. fig. 4; Blainv. Act. 476. pl. 38. fig. 2; Johnst. Hist. Brit. Zooph. ed. 2. p. 369.

Amathia lendigera, Lamz. Bull. Soc. Phil. 1812, iii. 184; Cor. Flex. 159; Expos. Méthod. p. 10; Corall. 68.

Pennaria lendigera, Oken, Lehrb. Nat. 93.

a. Dry, on paper. Presented by G. Johnston, M.D.

- Dry, on paper. Coast of Northumberland. Presented by G. Johnston, M.D.
- c. Dry. Cornwall. Presented by G. Johnston, M.D.
- d. Belfast Bay, W. Thompson, Esq. Presented by G. Johnston, M.D.

2. Vesicularia.

Vesicularia, Johnst. Brit. Zooph. ed. 2. 370. Vesicularia, sp. J. V. Thompson. Valkeria β, Flem. Brit. Anim. 551, 1828. Laomedea, sp. Lamx. 1812; Blainv. 1834. Halecium a, sp. Oken, Lehrb. Nat. 92, 1815.

1. Vesicularia spinosa.

Conferva marina cancellata, Raii Syn. i. 59. no. 11; Dill. Hist. Musc. 24. no. 22. pl. 4. fig. 22, fide D. Turner, Linn. Trans. vii. 106.

Conferva cancellata, Linn. Syst. ii. 720; With. Bot. Arrang. iv. 131. Silk Coralline, Ellis, Corall. 20. no. 17. pl. 11. figs. b, B, c, D. Sertularia spinosa, Linn. Syst. 1312; Ellis and Soland. Zooph. 48; Turt. Gmel. iv. 682; Esper, Pflanz. Sert. t. 28. figs. 1, 2, 3; Jameson, Wern. Mem. i. 564; Bosc, Vers, iii. 118; Berk. Syn. i. 219; Stew. Elem. ii. 446; Turt. Brit. Faun. 215; Lamk. Anim. s. Vert. ii. 120, ed. 2. ii. 148; Hogg's Stock. 33. Sertularia sericea, Pall. Elench. 114.

Laomedea spinosa, Lamx. Bull. Soc. Philom. 1812, iii. 184; Corall. 91; Blainv. Actinol. 474; Templeton, Mag. Nat. Hist. ix. 466.

Valkeria spinosa, Flem. Brit. Anim. 551; Couch, Zooph. Cornw.

38.

Vesicularia spinosa, J. V. Thompson, Zool. Illust. 98. pl. 3. figs. 1-8; Farre, Phil. Trans. 1837, 401. pl. 22; Johnst. Brit. Zooph. 250. pl. 29. figs. 1-4; Hassall, Ann. & Mag. Nat. Hist. vi. 170; Van Beneden, Les Bryozoaires, 30. pl. 4. fig. c; Couch, Corn. Faun. iii. 94. pl. 17. fig. 1; Johnst. Hist. Brit. Zooph. ed. 2. p. 370. t. 72. figs. 1-4.

a, b. Dry, on paper. Cork, J. V. Thompson, Esq. Pre-

sented by G. Johnston, M.D.

 Dry, on paper. Belfast Bay, W. Thompson, Esq. Presented by G. Johnston, M.D.

d. Dry, on paper. Presented by G. Johnston, M.D.

e. — ? Presented by G. Johnston, M.D.

3. BEANIA.

Beania, Johnst. Brit. Zooph. ed. 2. p. 371.

1. BEANIA mirabilis.

Beania mirabilis, Johnst. Ann. Nat. Hist. v. 272; Hist. Brit. Zooph. ed. 2. p. 372. f. 69, 70.

a. On a Pecten maximus "with Lepralia annulata, L. immersa, Tubipora hispida, and T. orbiculus." Presented by G. Johnston, M.D.

 On Anomia. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

4. VALKERIA.

Valkeria, Johnst. Brit. Zooph. 1847, ed. 2. p. 373.

Valkeria a, Flem. Brit. Anim. 550, 1828.

Vesicularia, sp. J. V. Thompson.

Cuscutaria, Blainv. Dict. S. N. lx. 461, 1830; Act. 497, 1834.

Campanularia, sp. Blaine. Man. Act.

Clytia, sp. Lamx. 1816. Sertularia, sp. Lamx. 1812.

Peripyxis, Ehrenb. Cor. Roth. Meer. 1834.

* CUSCUTARIA.

1. VALKERIA Cuscuta.

Climbing Dodder-like Coralline, Ellis, Corall. 28, no. 26. pl. 14. fig. c, C.

Sertularia Cuscuta, Linn. Syst. 1311; Pall. Elench. 125; Ellis and Soland. Zooph. 53; Berk. Syn. i. 218; Müll. Zool. Dan. iii. 62. t. 117. figs. 1-3; Turt. Gmel. iv. 680; Turt. Brit. Faun. 214; Wern. Mem. i. 564; Bosc, Vers. iii. 113; Stew. Elem. ii. 444; Fleming, Wern. Mem. iv. 485. pl. 15. fig. 1;

Lamx. Bull. Soc. Phil. 1812, iii. 184.

Valkeria Cuscuta, Flem. Brit. Anim. 550; Farre, Phil. Trans. 1837, 402. pl. 23; Hassall, Ann. & Mag. Nat. Hist. vii. 286; Van Beneden, Les Bryozoaires, 27. pl. 4. fig. B; Couch, Corn. Faun. iii. 96. pl. 17. fig. 3; Johnst. Hist. B. Z. ed. 2. p. 374. Vesicularia Cuscuta, Thomp. Zool. Illust. 97, pl. 2. figs. 1-4. Cuscutaria Cuscuta, Blainv. Dict. Sci. Nat. 1x. 461; Actinol.

497. pl. 82. fig. 2. Peripyxis Cuscuta, Ehrenb. Corall. Roth. Meer. 74.

a. Dry, on paper. Cork harbour, J. V. Thompson, Esq.

Presented by G. Johnston, M.D.

b. Dry, on paper, with Sertularia polyzonias and Cellularia reptans. Ayrshire. Presented by G. Johnston, M.D.

c. Dry, on paper. Bootle, Cheshire. Presented by G.

Johnston, M.D.

d. Ayrshire. P. W. Martin, Esq. Presented by G. Johnston, M.D.

e. Devonshire, Mrs. E. Griffith. Presented by G. Johnston,

M.D.

f. Dry. Presented by G. Johnston, M.D.

g. Dry. Presented by G. Johnston, M.D.
 k. Belfast Bay, W. Thompson, Esq. Presented by G. Johnston, M.D.

i. Ayrshire, P. W. Maclagan, Esq. Presented by G. John-

ston, M.D.

j. In spirits. Presented by G. Johnston, M.D.

** VALKERIA.

2. VALKERIA Uva.

Grape Coralline, Ellis, Corall. 27. no. 25. pl. 15. figs. c, C, D. Sertularia Uva, Linn. Syst. 1311; Ellis and Soland. Zooph. 53; Berk. Syn. i. 218; Turt. Gmel. iv. 682; Turt. Brit. Faun. 215; Stew. Elem. ii. 445; Jameson, Wern. Mem. i. 564; Bosc, Vers, iii. 117; Hogg's Stock. 34.

Clytia Uva, Lamour. Corall. 89; . Templeton, Mag. Nat. Hist.

ix. 466.

Valkeria Uva, Flem. Brit. Anim. 551; Hassall, Ann. & Mag. Nat. Hist. vi. 170; Couch, Zooph. Cornw. 38; Couch, Corn. Faun. iii. 95. pl. 16. fig. 5; Johnst. Hist. Brit. Zooph. ed. 2. p. 375. Campanularia ovifera, Blaine. D. S. N. Ix. 438; Man. Act. 473. Inhab.

*** VESICULARELLA.

3. VALKERIA pustulosa.

Vulkarin pustulosa, Johnst. Hist. Brit. Zooph. ed. 2. p. 376. Dichotomous tubular Coralline, Ellis, Corall. 54. pl. 27. fig. b, B. Sertularia pustulosa, Ellis and Soland. Zooph. 54; Turt. Gmel. iv. 680; Bosc, Vers, iii. 113; Stew. Elem. ii. 444; Turt. Brit. Faun. 214; Flem. Brit. Anim. 551.

Vesicularia pustulosa, Thomp. Zool. Illust. 99. pl. 1. figs. 5-11. a. Dry, on paper. Cork harbour, J. V. Thompson, Esq. Presented by G. Johnston, M.D.

b, c. Dry, on paper. Presented by G. Johnston, M.D.

5. BOWERBANKIA.

Bowerbankia, Farre, Phil. Trans. 1837; Johnst. Brit. Zooph. ed. 1. 255, ed. 2. 377.

Valkeria, sp. Coldstream; Johnst. Brit. Zooph. ed. 1.254, 1838. Serialaria, Templeton.

1. BOWERBANKIA imbricata.

Bowerbankia imbricata, Johnst. Hist. Brit. Zooph. ed. 2. p. 377. fig. 71. t. 72. figs. 5, 6.

Primary state. Bowerbankia densa, Farre, Phil. Trans. 1837, p. 391. pl. 20, 21; Johnst. Brit. Zooph. 255; W. Thompson, Ann. Nat. Hist. v. 252; Van Beneden, Les Bryozoaires, 29. pl. 4. fig. A.

Adult state. Sertularia imbricata, Adams, Linn. Trans. v. 11. pl. 2. figs. 5-11; Turt, Gmel. iv. 683; Turt. Brit. Faun. 216; Stew. Elem. ii. 450; Thomp. Zool. Illust. 94. pl. 1. figs. 1-4.

Valkeria glomerata, Coldstream, Edinb. New Phil. Journ. ix. 235. pl. 2. figs. 1, 2; Edinb. Journ. Nat. & Geog. Sc. iii. 53. Serialaria imbricata et S. verticillata, Templeton, Mag. Nat. Hist.

ix. 467. fig. 66.

Valkeria imbricata, Johnst. Brit. Zooph. 254; Hassall, Ann. & Mag. Nat. Hist. vii. 363, pl. 8, fig. 2; Couch, Corn. Faun. iii. 95. pl. 17. fig. 2.

a. Dry, on paper. Cork harbour, J. V. Thompson, Esq.

Presented by G. Johnston, M.D.

b. Dry, on paper. Youghal, Miss Ball. Presented by G. Johnston, M.D.

c, d, e. In spirits. Presented by G. Johnston, M.D.

f. In spirits (primary state). Presented by G. Johnston,

g. In spirits (secondary state). Southampton. Presented by G. Johnston, M.D.

6. FARRELLA.

Lagenella, Farre, Phil. Trans. 1837; not Ehrenberg, 1832. Farrella, Ehrenberg, Ann. & Mag. Nat. Hist. vii. p. 303; Johnst. Hist. Brit. Zooph. ed. 2. p. 380.

Laguncula, Van Beneden, Mem. 5, 1845.

Bowerbankia, sp. Johnst. Brit. Zooph. ed. 1. 256, 1838.

I. FARRELLA repens.

Parrella repens, Johnst. Hist. Brit. Zooph. ed. 2. p. 380.

Lagenella repens, Farre, Phil. Trans. 1837, p. 403. pl. 24; W. Thompson, Ann. Nat. Hist. v. 252; Hassall, Ann. & Mag. Nat. Hist. vii. 364.

Bowerbankia repens, Johnst. Brit. Zooph. 256.

Laguncula repens, Van Beneden, Recherch. 25. pl. 1 & pl. 2 A.

a. Dry, on paper, with Cellularia scuposa and C. ciliata.
Ireland, W. Thompson, Esq. Presented by G. Johnston,
M.D.

Fam. 2. CRISTATELLIDÆ.

Polypes douteux (P. dubia), Blainv. Dict. Sci. Nat. 1830, lx.

Polypiaria hippocrepia, P. Gervais, Ann. des Sc. Nat. vii. (1837), p. 77 (from Blainv.).

Lunniades, Johnst. Brit. Zooph. ed. 1. 248, 1838; Allman, Ann. & Mag. Nat. Hist. xiii.

Polyzoa hippocrepia, J. E. Gray, Syn. Brit. Mus. (1842), p. 135;
Johnst. Hist. Brit. Zooph. ed. 2. p. 386, 1847.

Cristatellidæ, Gray, Syn. Brit. Mus. 1842, 135. Cristatellidæ & Plumatellidæ, Johnst. Brit. Zooph, ed. 2, 387-391, 1847.

1. CRISTATELLA.

Cristatella, Cuvier, Tab. Elem. 656, 1797; R. A. 1817; Oken, Lehrb. Nat. 54.

Cristatella, Lamk. 1801, animal only, Lamk. 1818.

1. CRISTATELLA Mucedo.

De kleine Vederbos-poly, met. het. balvormig lyf, Rosel, Hist.

der Insect. iii.; Polyp. 517. pl. 91.

Cristatella Mucedo, Cuv. Tub. Elem. 656 (1797); Règ. Anim. iii. 296; Gervais, Ann. des Sc. Nat. Part. Zool. vii. 77, n. s.; Turpin, ibid. vii. 65. pl. 2, 3. figs. 1-7; Allman, Athenaum, Sept. 1846, p. 1005; Johnst. Hist. Brit. Zooph. ed. 2. p. 387. fig. 72.

C. stagnorum, Lamk. Syn. 385 (animal, not sponge).

Cristatella Centrifuga, Oken, Lehrb. Nat. 54.

C. vagans, Lamk. Anim. s. Vert. ii. 97, ed. 2. ii. 110; Blaine. Actinol. 489, 678. pl. 85. fig. 7; Bosc, Vers, iii. 180. pl. 30. fig. 9; Stark. Elem. ii. 442.

C. mirabilis, Dalyell, Edinb. New Phil. Journ. xvii. 414; Rep.

Brit. Assoc. 1834, 604.

Inhab. Fresh water, Scotland, Dalyell. Ireland, Allman.

2. ALCYONELLA.

Pharetria, Oken, Lehrb. Nat. 53, 1815.

Alcyonella, Lamk. Hist. Anim. s. Vert. ii. 100, 1816; Expos. Méth. 71, 1821; Blainv. Diet. Sci. Nat. lx. 456, 1830.

Plumatella, sp. Bosc, Hist. Vers, iii. 80?, 1822; Lamk. Hist. Anim. s. Vert. ii. 107 (not Syst. 1801).

Naïsa (sp.?), Lamx. Pol. Flex. 223, 1816.

Tubularia a, Cuvier, Tab. Elem. 664 (1798).

Tubularia, Vaucher, Bull. Soc. Phil. iii. 158 (1812).

Tubularia, sp. Linn.; Pallas.

Cristatella, Flem. Brit. Anim. 518 (1828).

Fedel and Roehrel, Oken, Lehrb. Nat. 53, 1815.

1. ALCYONELLA campanulata.

Variation a, sponge-like, massive.

Alcyonium fluviatile, Brug. Ency. Méth. 24, 410; Bosc, Vers, iii. 159; Lamx. Cor. Flex. 354; Corall. 250.

Ephydatia Gibbsii, Gray, Brit. Pl. i. 353.

Alcyonella stagnorum, Lamk. Anim. s. Vert. ii. 102, ed. 2. ii. 442; Lamx. Soland. t. 76. figs. 5-8 (bad); Teale, Trans. Leeds Phil. & Lit. Soc. i. 116. pl. 12; Mag. Zool. & Bot. i. 293; Johnst. Hist. Brit. Zooph. ed. 2. p. 391. figs. 73, 74, 75. t. 74. 478; Blainv. Dict. Sci. Nat. 1x. 456; Actinol. 491. pl. 85. fig. 8.

A. fluviatilis, Raspail, Mém. de la Soc. d'Hist. Nat. de Paris, iv.

130. pl. 12-16.

Variation β, see Lamx. Pol. Flex. 223, 354; Johnst. Brit. Zooph. ed. 2. p. 390.

Polypes à Panache, Tremb. Mém. 210. pl. 10. figs. 8, 9; Reaum. Mém. des Insect. vi. pref. lxxvi.

The Bell-flower Animal or Plumed Polype, Baker, Employ. Micros. 306, pl. 12. figs. 15-22.

Hydra campanulata, Linn. Syst. ed. 10. 817.

Tubularia crystallina, Pall. Elench. 85.

T. campanulata, Linn. Syst. 1303; Berk. Syn. i. 215; Shaw, Nat. Mise. x. pl. 354; Turt. Gmel. iv. 668; Turt. Brit. Faun. 211; Adams on the Microscope, 449. pl. 22. fig. 32; Bosc, Vers, iii. 92; Blumenb. Man. 272; Cuv. Tab. Elem. 665. Leucophra heteroclita, Mill. Infus. 158. pl. 32. figs. 27-34, co-pied in Encyclop. Méthod. Vers, pl. 11. figs. 40-46 (in its fætal condition).

T. reptans, Bosc, Vers, iii. 93; Blumenb. Naturg. 440.

Plumatella cristatu, Lamk. Anim. s. Vert. ii. 107, ed. 2. ii. 122; Stark. Elem. ii. 441; Blainv. Actinol. 490.

Pl. campanulata, Risso, L'Europ. Mérid. v. 308.

Naïsa reptans, Lamx. Corall. Flex. 99. pl. 6. fig. 4. from Trembley. Cristatella campanulata, Flem. Brit. Anim. 518.

C. paludosa, Dalyell, Rep. Brit. Assoc. 1834, 606.

Fedel, or Tub. crystallina s. reptans, Oken, Lehrb. Nat. 53.
Roehrel, or Tub. gelatinosa s. campanulata, Oken, Lehrb. Nat. 53.

a. A rounded mass. Presented by G. Johnston, M.D.
b. In Sticks, Serpentine River, Hyde Park, Middlesex.
c. In an expanded mass. Presented by G. Johnston, M.D.

3. PLUMATELLA.

Plumatella, Bosc, Hist. Vers, iii. 80 (1802); Lamk. Hist. Anim.
 s. Vert. ii. 108 (1816); Johnst. Brit. Zooph. ed. 2, 402 (1847).
 Naïsa, Lamx. Pol. Flex. 222 (1816).

Tubipora, sp. Linn.

Tubularia, sp. Müller; Cuvier, Tab. Elem. 665; Vaucher, Bull. Soc. Philom. iii. 158.

1. PLUMATELLA repens.

Tubipora repens, Linn. Syst. ed. 10. 790.

Tubularia repens, Müll. Verm. ii. 16; Zool. Dan. Prod. 254; Bosc, Vers, iii. 93.

Roehrel, or T. repens, Oken, Lehrb. Nat. 54.

Tubul. reptans, Turt. Gmel. iv. 669; Cuvier, Tab. Elem. 665; Vaucher, Bull. Soc. Phil. in. t. 19. figs. 1-5; Schæffer, Armpol.

1754, t. 1. figs. 1, 2.

Plumatella repens, Lamk. Anim. s. Vert. ii. 108, ed. 2. ii. 123; Flem. Brit. Anim. 522; Stark. Elem. ii. 441; Landsborough, Scot. Christ. Herald, n. s. 1.727; Hassall, Ann. & Mag. Nat. Hist. x. 153; G. J. Allman, Proc. R. Irish Acad. 1843; W. Thompson, Ann. Nat. Hist. v. 254; Allman, Ann. & Mag. Nat. Hist. xiii. 330; Johnst. Hist. Brit. Zooph. ed. 2. p. 403. Naïsa repens, Lamx. Cor. Flex. 98.

 a. Dry, on a submerged leaf of Plantago major, in a pond at Lismoyne near Belfast, W. Thompson, Esq. Presented

by G. Johnston, M.D.

2. PLUMATELLA emarginata.

Plumatella emarginata, Allman, Ann. & Mag. Nat. Hist. xiii. 331; Johnst. Hist. Brit. Zooph. ed. 2. p. 404. Inhab. Fresh water. Dublin, Bandon, Allman.

3. PLUMATELLA fruticosa.

Plumatella fruticosa, Albman, Ann. & Mag. Nat. Hist. xiii. 331; Johnst. Hist. Brit. Zooph. ed. 2, p. 404.

Inhab. Fresh water. Dublin, Bandon, Glandore, Allman.

4. NAïSA.

Naïsa, sp. Lamx. Pol. Flex. 224.

Fredericella, P. Gervais, Ann. Sci. Nat.

Plumatella, sp. Bose, Hist. Vers, iii, 80; Flem. Brit. Anim. 553. Tubularia, sp. Blumenb.; Cuv. Tab. Elem. 665.

1. Naïsa sultana.

Tubularia sultana, Blumenb. Man. 272. pl. 1. fig. 9; Cuv. Tab. Elem. 665; Bosc. Vers, iii. 93.

Plumatella gelatinosa, Flem. Brit. Anim. 553.

Fredericella sultana, Allman, Ann. & Mag. Nat. Hist. xiii. 331; W. Thompson, Rep. Brit. Assoc. 1843, p. 285; Couch, Corn. Faun. iii. 135; Johnst. Hist. Brit. Zooph. ed. 2. p. 405.

Naïsa sultana, Lamx. Pol. Flex. 224.

Inhab, Fife, Lochmill-loch, Fleming. Penzance, Couch. Dublin, Bandon, Allman.

2. Naïsa dilatata.

Fredericella dilatata, Allman, Ann. & Mag. Nut. Hist. xiii. 331; Johnst. Hist. Brit. Zooph. ed. 2. p. 405. Inhab. Fresh water. Dublin, Allman.

Fam. 3. PALUDICELLAIDE.

Paludicellaidæ, Johnst. Brit. Zooph. ed. 2. p. 405.

1. PALUDICELLA.

Paludicella, P. Gervais; Allman, Proc. R. Irish Acad. 1843; Johnst. Hist. Brit. Zooph. ed. 2. p. 405.

1. PALUDICELLA articulata.

Paludicella articulata, G. J. Allman, Proc. Roy. Irish Acad. 1843, t. 1; Ann. & Mag. Nat. Hist. xiii. 331; Johnst. Hist. Brit. Zooph. ed. 2, p. 405. fig. 77.

a. Dry, on paper. Lough Earn, W. Thompson, Esq. Pre-

sented by G. Johnston, M.D.

Fam. 4. FLUSTRADE.

Flustra, Linn.; Johnst. Brit. Zooph. ed. 2. p. 342. Flustradie, Gray, Appendix, and Proc. Zool. Soc. 1848. Escharidæ part., Johnst. Brit. Zooph. ed. 1. 248, ed. 2. 263; Gray, Syn. Brit. Mus. 1842, 135.

1. FLUSTRA.

Flustra, sp. Linn. Flustra, Lamk. Syst. 1801; Gray, Appendix.

1. FLUSTRA foliacea.

Fucus marinus scruposus albidus telam sericeam texturâ suâ emulans, Morris, Hist, Plant. iii. 646. t. 8. fig. 16 (bona).

Facus telam lineam sericeamve textură suă æmulans, Raii Syn. 42. no. 9; Jussieu, Mém. Acad. Roy. des Sc. 1742, 298. pl. 10. fig. 3.

Broad-leaved Hornwrack, Ellis, Corall. 70. no. 2. pl. 29. fig. a, A, B, b.

Curious Sea-weed, Hooke, Microg. 140. pl. 9. fig. 2, pl. 14. fig. 1. Eschara foliacea, Linn. Syst. ed. 10. 804; Patt. Etench. 52.

Flustra foliacea, Linn. Syst. 1300; Miill. Zool. Dan. Prod. 253; Ellis and Soland. Zooph. 12. pl. 2. fig. 8; Esper, Pflanz. Flust. t. 1. figs. 1, 2; Van Beneden, Recherch. 56. pl. 7. figs. 11, 17; Berk. Syn. i. 214; Lamk. Anim. s. Vert. ii. 156. ed. 2. ii. 219; Grant, Edinb. New Phil. Journ. iii. 111, 337; Flem. Brit. Anim. 535; Johnst. Trans. Newc. Soc. ii. 263; Mag. Nat. Hist. iii. 483. fig. 120; Templeton, ibid. ix. 469; Risso, L'Europ. Mérid. v. 333; Blainv. Actinot. 450. pl. 75. fig. 1; Couch, Zooph. Cornw. 53; Corn. Faun. iii. 121. pl. 21. fig. 1; Johnst. Hist. Brit. Zooph. ed. 2. p. 343. t. 62. figs. 1, 2.

a. Dry. Frond short, broad. The Tay, Dundee, W. Jackson, jun. Presented by G. Johnston, M.D.

 Dry. Frond short, broad. Frith of Forth. Presented by G. Johnston, M.D.

c, d, i. Dry. Frond elongate, narrow. Frith of Forth. Presented by G. Johnston, M.D.

e. Dry. Frond elongate, narrow. Berwick Bay. Presented by G. Johnston, M.D.

f. Dry. Frond elongate, end of branches dilated. Ireland, A. H. Hassall. Presented by G. Johnston, M.D.

g, h. Tay. Presented by Capt. Ducane, R.A.

 Spread on shell with Lepralia biforis. Presented by G. Johnston, M.D.

2. Flustra membranacea.

Flustra membranacea, Linn. Syst. 1301; Fabr. Faun. Grænt. 437; Müll. Zool. Dan. Prod. 253; Ellis and Soland. Zooph. 18; Flem. Brit. Anim. 536; Johnst. Trans. Newc. Soc. ii. 265; Blainv. Actinol. 450; Couch, Zooph. Cornw. 55; Corn. Faun. iii. 123. pl. 21. fig. 2; Johnst. Hist. Brit. Zooph. ed. 2. p. 348. t. 66. figs. 1, 2, 3.

Fl. telacea, Lamk. Anim. s. Vert. ed. 2. ii. 223; Grant, loc.

cit. iii. III.

Membranipora membranacea, Blainv. Actinol. 447.

a, b, c, d, e. On Fucus. Berwick Bay. Presented by G. Johnston, M.D.

f. On Gigastina. "Ayrshire, Rev. D. Landsborough." Pre-

sented by G. Johnston, M.D.

g. On Fucus vesiculosus. Presented by G. Johnston, M.D. h. Patch on Fucus. Holy Island. Presented by G. Johnston, M.D.

2. CHARTELLA.

Flustra, sp. Linn.; Johnst. Brit. Zooph. ed. 2. p. 343. Chartella, Gray, Appendix and Proc. Zool. Soc. 1848.

1. CHARTELLA papyracea.

Eschara papyracea utrinque cellifera, summitatibus securis aciei

instar truncatis, Ellis, Corall. pl. 38. fig. 8.

Flustra papyracea, Ellis and Soland. Zooph. 13; Flem. Brit. Anim. 535; Lister, Phil. Trans. 1834, 384. pl. 12. fig. 3; Milne-Edwards, Lam. Anim. s. Vert. ed. 2. ii. 220; Blainv. Dict. Sci. Nat. lx. 415.

F. chartacea, Turt. Gmel. iv. 663; Turt. Brit. Faun. 209; Stew. Elem. ii. 436; Couch, Corn. Faun. iii. 121; Johnst. Hist. Brit. Zooph. ed. 2. p. 343. t. 60. figs. 5, 6; Lamx. Pol. Flex.

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a, b, c, d. Dry. Blackrock, Dublin. Presented by G. Johnston, M.D.

e, f. Dry. Hastings, Sussex. Presented by G. Johnston, M.D.

2. CHARTELLA securifrons.

Figure Marinus scruposus, Raii Syn. 43. no. 10; Morris, Hist. Plant. Oxon. iii. 546. t. 1. fig. 17 (opt.).

Narrow-leaved Hornwrack, Ellis, Corall. 69. no. 1. t. 28. fig. 1. a,

Eschara foliacea B, Linn. Syst. ed. 10. 804.

E. securifrons, Pall. Elench. 56.

Flustra truncata, Linn. Syst. 1300; Müll. Zool. Dan. Prod. 253; Ellis and Soland. Zooph. 11; Berk. Syn. i. 214; Esper. Pflanz. Flust. t. 3. figs. 1, 2; Oliv. Zool. Adriat. 274; Lamk. Anim. s. Vert. ed. 2. ii. 219; Grant, loc. cit. 111; Flem. Brit. Anim. 535; Johnst. Trans. Newc. Soc. ii. 264. pl. 12. fig. 1; Templeton, Mag. Nat. Hist. ix. 469; Johnst. Hist. Brit. Zooph. ed. 2. p. 344. t. 62. figs. 3, 4; Blainv. Dict. Sci. Nat. lx. 415.

a. Dry, on paper. Frith of Forth. Presented by G. John-

ston, M.D.

Dry, on paper. Belfast Bay, R. Paterson, Esq. Presented by G. Johnston, M.D.

c, d. Dry, on paper. Northumberland. Presented by G.

Johnston, M.D.

e. With Sertularia polyzonias. Presented by G. Johnston, M.D.

3. CARBASEA.

Flustra, sp. Linn.; Johnst. Brit. Zooph. Carbasea, Gray, Appendix, Proc. Zool. Soc. 1848.

1. CARBASEA papyracea.

Porus cervinus, Marsil. Hist. Phys. de la Mer, 64. pl. 6. figs. 25, 26.

Eschara papyrea, Pall. Zooph. 56.

Flustra Carbasea, Ellis and Soland. Zooph. 14. pl. 3. figs. 6, 7;
Turt. Gmel. iv. 663; Jameson, Wern. Mem. i. 563; Turt. Brit.
Faun. 209; Stew. Elem. ii. 436; Lamk. Anim. s. Vert. ed. 2.
ii. 221; Flem. Brit. Anim. 535; Grant, Edin. New Phil.
Journ. iii. 111; Johnst. Trans. Newc. Soc. ii. 264. pl. 9. fig. 4;
Templeton, ut sup. cit. 469; Roget, Bridgw. Treat. i. 165.
figs. 63, 64, & 172. figs. 69, 70; Dalyell, Edin. New Phil.
Journ. xvii. 413; Rep. Brit. Assoc. 1834, 603; Blainv. Diet.
Sci. Nat. 1x. 415; Johnst. Hist. Brit. Zooph. ed. 2. p. 345.
t. 63. figs. 1, 2.

Flustra papyracea, Esper, Pflanz. Flust. t. 2. figs. 1-3.

a, b, d. Dry, on paper. Coast of Northumberland. Presented by G. Johnston, M.D.

 Dry, on paper. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

4. AVICULARIA.

Avicularia, J. V. Thompson, MSS. 1847; Gray, Proc. Zool. Soc. 1848.

1. AVICULARIA flabellata.

Corallina cum appendiculis lateralibus avium capitum formâ, Ellis, Corall. pl. 58. fig. 7.

Cellularia Avicularia B. Pallas, Elench. 68.

Flustra avicularis, Sow. Brit. Misc. ii. 21. pl. 71; Flem. Brit. Anim. 536; Johnst. Trans. Newc. Soc. ii. 265; Blainv. Dict. Sci. Nat. lx. 416; Man. Act. 451; Couch, Zooph. Cornw. 54; Corn. Faun. iii. 122; Johnst. Hist. Brit. Zooph. ed. 2. p. 346. t. 63. figs. 3, 4.

F. angustiloba, Lamk. Hist. Anim. s. Vert. ii. 158, ed. 2. ii. 222?

F. capitata, Hogg's Stock. 36.

Crisia flustroides, Lamour. Corall. Flex. 141?

Avicularia flabellata, J. V. Thompson, MSS. Brit. Mus.

a. Dry, on paper. Dublin Bay, R. Ball, Esq. Presented by G. Johnston, M.D.

b, c, d. Dry. Presented by G. Johnston, M.D.

e. Dry, on paper. Cork, J. V. Thompson, Esq. Presented by G. Johnston, M.D.

5. FLABELLARIA.

Flabellaria, Gray, Appendix, Proc. Zool. Soc. 1848.

Flustra, sp. Johnst. Brit. Zooph. ed. 2. 347; Gray, Proc. Zool. Soc. 1847.

Sertularia, sp. Olivi, Zool. Adriat. 291.

1. FLABELLARIA spiralis.

Flustra Murrayana, Bean, MSS.; Johnst. Hist. Brit. Zooph. ed. 2. p. 347. t. 63. figs. 5, 6.

Sertularia spiralis, Olivi, Zool. Adriat. 291. t. 6. f. 2.

a, b. Dry. Coast of Northumberland. Presented by G. Johnston, M.D.

c, d, e, "Flustra Murrayana. Scarborough, W. Bean, Esq." Presented by G. Johnston, M.D.

f, g. Dry. "Zetland, E. Forbes, Esq." Presented by G. Johnston, M.D.

h, i. Dry. Orkney. Presented by G. Johnston, M.D.

k. With Cellularia ternata. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

2. FLABELLARIA setacea.

Flustra Ellisii, Flem. Wern. Mem. ii. 251. t. 17. figs. 1-3. Flustra setacca, Flem. Brit. Anim. 536; Johnst. Brit. Zooph. ed. 2.

p. 346; Blainv. Dict. Sci. Nat. lx. 416. Inhab. Zetland, Northmavine, Fleming, 1808.

6. ANNULIPORA.

Annulipora, Gray, Appendix, Proc. Zool. Soc. 1848. Membranipora, Johnst. Brit. Zooph. 327; not Blaine. Discopora, sp. Lamk. 1816. Flustra, sp. Müller; Lamk. 1816.

1. ANNULIPORA pilosa.

Irregular spongy foliaceous Coralline, Ellis, Corall. 73. no. 4. pl. 31.

Eschara pilosa, Pallas, Elench. 50.

Flustra pilosa, Linn. Syst. 1301; Müll. Zool. Dan. Prod. 253; Ellis and Soland. Zooph. 13; Esper, Pflanz. Flust. t. 4. figs. 1, 2; Berk. Syn. i. 214; Lamk. Anim. s. Vert. ii. 159, ed. 2. ii. 224; Blainv. Dict. Sc. Nat. lx. 415; Grant, Edin. New Phil. Journ. iii. 111; Flem. Brit. Anim. 537; Risso, L'Europ. Mérid. v. 335; Johnst. Trans. Newc. Soc. ii. 265. pl. 9. fig. 5; Lister. Phil. Trans. 1834, 384. pl. 12. fig. 2; Templeton, Mag. Nat. Hist. ix. 469.

Membranipora pilosa, Johnst. Brit. Zooph. 280. pl. 34. figs. 10-12; Couch, Corn. Faun. iii. 119; Van Beneden, Recherch. 53. figs. 1-10; Johnst. Hist. Brit. Zooph. ed. 2. p. 327. t. 56. fig. 6.

Var. 1. On flat sea-weeds assuming a stellate form.

Membranipora pilosa var. a, Johnst. Brit. Zooph. 327. t. 56. f. 6. Membranipora stellata, W. Thompson, Ann. Nat. Hist. v. 101; Hassall, Ann. & Mag. Nat. Hist. vii. 369.

a, d. On filiform sea-weed. Presented by G. Johnston, M.D.

e. River Tay. Presented by Capt. Ducane, R.A.

b, c. Presented by G. Johnston, M.D.

f. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

g. Ireland, with Flustra lineata, W. Thompson, Esq. Pre-

sented by G. Johnston, M.D.

 Ireland, with Flustra lineata and Lepralia hyalina, W. Thompson, Esq. Presented by G. Johnston, M.D.

2. ANNULIPORA dentata.

Flustra dentata, Ellis and Soland. Zooph. 15; Turt. Brit. Faun. 209; Lamk. Hist. Anim. s. Vert. ii. 158, ed. 2. ii. 224; Templeton, May. Nat. Hist. ix. 469.

Flustra lineata, Esper, Pflanz. Flust. t. 6 (? not good).

Membranipora pilosa, Farre, Phil. Trans. 1837, 412. t. 27. figs.

Membranipora pilosa var. β, Johnst. Brit. Zooph. 327.

Eschara millepora, Ellis, Corall. t. 29. fig. D; Ellis, Phil. Trans. abridg. x. 492. t. 12. fig. 4. D.

a. On wood. Presented by G. Johnston, M.D.

7. FLUSTRELLA.

Flustrella, Gray, Appendix, Proc. Zool. Soc. 1848.

Flustra, sp. O. Fabr.; Blainv.; Johnst.

Membranipora, sp. Johnst. Brit. Zooph. ed. 1. 282. Aleyonidium, sp. Johnst. Brit. Zooph. ed. 2. 363.

1. FLUSTRELLA hispida.

Flustra hispida, Fabr. Faun. Grænl. 438; Jameson, Wern. Mem. i. 563; Flem. Brit. Anim. 537; Johnst. Trans. Newc. Soc. ii. 266. pl. 9. fig. 7; Blainv. Act. 450.
Flustra spongiosa, Templeton, Loud. Mag. Nat. Hist. ix. 469;

W. Thompson, Ann. Nat. Hist. v. 253.

Membranipora spongiosa, Johnst. Brit. Zooph. 282.

Flustra carnosa, Johnst. Brit. Zooph. 288. pl. 37. fig. 5; Couch, Corn. Faun. iii. 125; Hassall, Ann. & Mag. Nat. Hist. vii. 369. Alevonidium? hispidum, Johnst. Hist. Brit. Zooph. ed. 2. p. 363.

a & b. Dry, on paper. Flustra spongiosa! "From R. Brown,

Esq." Presented by G. Johnston, M.D.

c. Dry, on paper. Flustra spongiosa. Presented by G. Johnston, M.D.

d. Dry, on paper. "Flustra carnosa." Presented by G. Johnston, M.D.

8. CONOPEUM.

Conopeum, Gray, Appendix, Proc. Zool. Soc. 1848.

Flustra, sp. Hassall, Ann. Nat. Hist. vii. 369; Johnst. Brit. Zooph. 350.

Lepralia, sp. Johnst. Brit. Zooph. ed. 2. 350.

Membranipora, sp. Blainv. Man. Act. 447; Johnst. Brit. Zooph. ed. 2, 350.

Discopora, sp. Lamk. Hist. ii. 167, ed. 2. ii. 251-

1. CONOPEUM reticulum.

Millepora reticulum, Esper, Millep. t. 11. figs. 1, 2 (on shell).

Discopora reticulum, Lamk. Hist. ii. 167, ed. 2. ii. 250,

Membranipora reticulum, Blainv. Man. Act. 447.

Flustra distans, Hassall, Ann. Nat. Hist. vii. 369; Johnst. Brit. Zooph. 350.

Flustra hibernica, Hassall, Ann. & Mag. Nat. Hist. vi. 172. t.7. fig. 1. vii. 370.

Lepralia pedilostoma part., Johnst. Brit. Zooph. ed. 2, 315.
Membranipora membranacea?, Johnst. Brit. Zooph. t. 57. figs.
11, 12.

Flustra Peachii, Couch, 9th Rep. Cornwall Polytechnic Soc. 81.
Flustra Savartii, Aud. Exp. i. 240, from Savigny, Egypt. Polypes, t. 10. fig. 10.

Membranipora Peachii, Couch, Corn. Faun. iii. 120. t. 22. fig. 13.

- On rock. "Flustra distans." Presented by G. Johnston, M.D.
- On rock. "Flustra fallax." Presented by G. Johnston, M.D.

c. On slate. "Flustra Peachii or Lepralia pedilostoma."

Presented by G. Johnston, M.D.

d. On Mytilus edulis. "Flustra Peachii, Couch, or Lepralia

pedilostoma." Presented by G. Johnston, M.D. e, f. On Mytilus edulis. "Flustra Peachii, from Mr. Peach."

Presented by G. Johnston, M.D.

g. On rock. Lepralia pedilostoma. Presented by G. John-

ston, M.D.

A.? On slate. In bad state: the network between the thinner and discoloured "Flustra Peachii! a state of Membranipora membranacea." Presented by G. Johnston, M.D.

6. On a shell. In bad state: like h, "a state of Membranipora membranacea." Presented by G. Johnston, M.D.

9. CALLOPORA.

Callopora, Gray, Appendix, Proc. Zool. Soc. 1848. Flustra, sp. Linn.; Johnst. Brit. Zooph.

1. CALLOPORA lineata.

Flustra lineata, Linn. Syst. 1301; Müll. Zoot. Dan. Prod. 253; Fabr. Faun. Grænl. 437; Jameson, Wern. Mem.i. 563; Couch, Zooph. Cornw. 55; Corn. Faun. iii. 124; W. Thompson, Ann. Nat. Hist. v. 253; Johnst. Hist. Brit. Zooph. ed. 2. p. 349. t. 66. fig. 4. & p. 350.

Flustra spinifera, Johnst. Trans. Newc. Soc. ii. 266. pl. 9. fig. 6. Pl. hirta, Lamour. Corall. 49; Bosc, Vers, iii. 144; Risso, L'Eu-

rop. Mérid. v. 334.

a, b. Presented by G. Johnston, M.D.

c. With Lepralia coccinea, L. trispinosa, and L. immersa. Presented by G. Johnston, M.D.

d. With Lepralia coccinea. Presented by G. Johnston, M.D.
 e. On slate, with Lep. coccinea and L. nitida. Presented by G. Johnston, M.D.

f. On algae. Presented by G. Johnston, M.D.

g. On algæ. "Lepralia nitida var." Presented by G. Johnston, M.D.

h. On stone. "Flustra fallax, a state of Lepralia tenuis." Presented by G. Johnston, M.D.

10. AMPHIBLESTRUM.

Amphiblestrum, Gray, Appendix, Proc. Zool. Soc. 1848.
Membranipora, sp. Blaine.; Johnst. Brit. Zooph. ed. 2; M.-Edw.
Lamk. Hist. ed. 2. ii. 225.

Flustra, sp. Müller; Johnst. Brit. Zooph. ed. 1.

1. AMPHIBLESTRUM membranaceum.

Flustra membranacea, Müll. Zool. Dan. Prod. 253, no. 3054; Zool. Dan. iii. 63, t. 117, figs. 1, 2; Fabr. Faun. Grænl. 437; Lamour. Corall. 47; M.-Edw. Lamk. Hist. ed. 2, ii. 225; Blainv. Man. Act. 450.

Membranipora membranacea, Johnst. Hist. Brit. Zooph. ed. 2.
p. 328. t. 56. fig. 7. & p. 478; not Blaine. Dict. Sc. Nat. 412.
Flustra unicornis, Flem. Edin. Phil. Journ. ii. 87; Flem. Brit.

Finstra unicornis, Flem. Bain. Phil. Journ. u. 87; Flem. Brit. Act. 450; Johnst. Trans. Newc. Soc. ü. 266.
Membranipora unicornis, Blainv. D. S. N. lx. 412; Man. Act. 447.
Flustra tuberculata, Johnst. Brit. Zooph. 289; Bosc, Vers, iii. 143.
Flustra Peachii, Couch, Rep. Corn. Polytechnic Soc. 81 (see Johnst. Brit. Zooph. 478).

a, b, c, d, e. On shells and stone. Berwick Bay. Presented

by G. Johnston, M.D.
f. On slate. "Flustra unicornis." Presented by G. John-

ston, M.D.

g. On flint. "F. unicornis var." Presented by G. Johnston, M.D.

 On a shell. "Lepralia indentata, Hassall?" Presented by G. Johnston, M.D.

N. B. Flustra arenosa, Ellis and Soland. Zooph. 17; Stew. Elem. ii. 437; Bosc, Vers, iii. 142; Johnst. Hist. B. Z. ed. 2. p. 350. Millepora arenosa anglica, Raii Syn. i. 31.

English sandy Millepore, Ellis, Corall. 74. no. 5. pl. 25. fig. e.

Eschara lutosa, Pall. Elench. 37.

Aleyonium arenosum, Turt. Gmel. iv. 564; Turt. Brit. Faun. 207.
According to Mr. Boys "is undoubtedly the nidus of some marine animal, as I have found the cells entire, with eggs in each."
Linn. Trans. v. 231. Mr. J. Hogg has proved that it is the nidus of Natica monilifera, Linn. Trans. xiv. 318, &c.

Fam. 5. BUGULIDÆ.

Bugulidæ, Gray, Appendix, Proc. Zool. Soc. 1848.

Cellularidæ part., Johnst. Brit. Zooph.

Escharidæ part., Johnst. Brit. Zooph. ed. 1. 248, ed. 2. 264; Gray, Syn. Brit. Mus. 1847, 135.

1. CRISULARIA.

Crisularia, Gray, Appendix, Proc. Zool. Soc. 1848.

Crisia, sp. Lamw. 1812, 1816. Bicellaria, sp. Blainv. 1830.

Cellularia, sp. Pallas; Johnst. Brit. Zooph.

Cellaria, sp. Soland.

1. CRISULARIA plumosa.

Corallina pumila erecta ramosior, Raii Syn. i. 37. no. 20, t. 2. fig. 1; Ellis, Phil. Trans. abridg. x. 346. pl. 8. fig. b, B, D.

Soft-feathered Coralline, Ellis, Corall. 33. no. 1. pl. 18. fig. a, A. Sertularia fastigiata, Linn. Syst. 1314; Fabr. Faun. Grænl. 445; Berk. Syn. i. 219.

Cellularia plumosa, Pall. Elench. 66; Couch, Corn. Faun. iii. 128. pl. 23. fig. 4; Johnst. Hist. Brit. Zooph. ed. 2. p. 341.

t. 61. figs. 1-5.

Cellularia fastigiata, Blumenb. Man. 273; Flem. Brit. Anim. 539. Cellaria plumosa, Ellis and Soland. Zooph. 21; Lamk. Anim. s. Vert. ed. 2. ii. 120.

Crisia plumosa, Lamour. Bull. Soc. Phil. 1812, iii. 185; Corall.

62.

Crisia fastigiata, Templeton, Ann. & Mag. Nat. Hist. ix. 468. Bicellaria plumosa, Blainv. Dict. Sc. Nat. lx. 424; Act. 459.

a, b, c. Copinsha, 1 mile 37 fathoms, June 1845. Presented by G. Johnston, M.D.

d. Torquay, Devonshire, Dr. C. Presented by G. Johnston, M.D.

e, f, g. Presented by G. Johnston, M.D.

2. SQUPOCELLARIA.

Scupocellaria, Van Beneden; Recherch. 43.

Bicellaria, sp. Blainv. 1830.

Cellularia, sp. Pallas; Flem.

Cellaria, sp. Soland.; Lumk. 1816.

Scuparia, sp. Oken, Lehrb. Nat. 90, 1816.

1. Scupocellaria scruposa.

Creeping stony Coralline, Ellis, Corall. 38. no. 4. pl. 20. c, C. Celliferous Coralline with angular edges to its cells, Ellis, Phil, Trans. xlviii. pl. 13. no. 7; Phil. Trans. abridg. x. 493. fig. 7. K, L.

Sertularia scruposa, Linn. Syst. 1315; Esper, Pflanz. Sert. t. 15.

figs. 1-3; Berk. Syn. i. 220.

Cellularia scruposa, Pall. Elench. 72; Flem. Brit. Anim. 539; Couch, Zooph. Cornw. 57; Corn. Faun. iii. 126. pl. 23. fig. 2; Reid, Ann. & Mag. Nat. Hist. xv. 69. & xvi. 388; Johnst. Hist. Brit. Zooph. ed. 2. t. 58. figs. 5, 6. Cellaria scruposa, Ellis and Soland. Zooph. 23; Bosc, Vers, iii. 132. pl. 29. fig. 7; Lamk. Anim. s. Vert. ii. 141. ed. 2. ii. 192; Johnst. Trans. Newc. Soc. ii. 261. pl. 11. fig. 5.

Scuparia scruposa, Oken, Lehrb. Nat. 90.

Crisia scruposa, Lamour. Corall. 60; Templeton, lib. cit. ix. 469. Bicellaria scruposa, Blainv. Act. 459.

Scupocellaria scruposa, Van Beneden, Recherch. 43. & 50. pl. 5.

figs. 8-16.

a, b, c. On Flustra. Liverpool, — Rylands, Esq. Presented

by G. Johnston, M.D.

? Presented by G. Johnston, M.D.

2. Scupocellaria reptans.

Creeping Coralline, Ellis, Corall. 37. pl. 20. no. 3. fig. b, B. Sertularia reptans, Linn. Syst. 1315; Fabr. Faun. Grant. 445.

S. repens, Berk. Syn. i. 220.

Cellularia reptans, Pall. Elench. 73; Flem. Brit. Anim.; Johnst. Brit. Zooph. 291. pl. 38. figs. 3, 4; Couch, Zooph. Cornw. 57; Corn. Faun. iii. 127. pl. 23. fig. 3; Reid, Ann. & Mag. Nat. Hist. xvi. 385; Johnst. Hist. Brit. Zooph. ed. 2. p. 337. t. 58. figs. 3, 4.

Cellaria reptans, Ellis and Soland. Zooph. 23; Lamk. Anim. s. Vert. ed. 2, ii. 191; Johnst. Trans. Newc. Soc. ii. 262.

Scuparia reptans, Oken, Lehrb. Nat. 90,

Crisia reptans, Lamour. Corall. 60; Templeton, Mag. Nat. Hist. ix. 469.

Bicellaria reptans, Blainv. Act. 459.

a, b, c, d. On sea-weed. Cornwall. Presented by G. Johnston, M.D.

e. On Corallines. Cornwall. Presented by G. Johnston, M.D. f. On Flustra. Berwick Bay. Presented by G. Johnston, M.D.

g. Coast of England. Presented by G. Johnston, M.D.

h. Berwick Bay. Presented by G. Johnston, M.D.

3. BICELLARIA.

Bicellaria, Blainv. D. S. N. 1830. Cellularia, Flem. Brit. Anim. 1828. Cellularia, sp. Pallas. Cellaria, sp. Soland.; Lamk. 1816. Bugula a, sp. Oken, Lehrb. Nat. 89.

1. BICELLARIA ciliata.

Ciliated Coralline, Ellis, Corall. 38. no. 5. pl. 20. d, D. Sertularia ciliata, Linn. Syst. 1316; Berk. Syn. i. 230; Esper,

Pflanz. Sert. t. 14. figs. 1, 2. Cellularia ciliata, Pall. Elench. 74; Flem. Brit. Anim. 540. Cellaria ciliata, Ellis and Soland. Zooph. 24; Lamk. Anim. s. Vert. ii. 139, ed. 2. ii. 186.

Bugula ciliata, Oken, Lehrb. Nat. 89.

Crisia ciliata, Lamour. Corall. 60; Templeton, Mag. Nat. Hist. ix. 468; Van Beneden, Mém. 51. pl. 6. figs. 9-11.

Bicellaria ciliata, Blainv. Act. 459.

Cellularia ciliata, Johnst. Brit. Zooph. 291. pl. 38. figs. 1, 2;
 Couch, Zooph. Cornw. 56; Corn. Faun. iii. 126. pl. 23. fig. 1;
 Johnst. Hist. Brit. Zooph. ed. 2. p. 335. t. 58. figs. 1, 2.

a, b, c. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

4. CANDA.

Canda, Lamx. 1816 & 1821; Blainv. 1830. Cellaria, sp. Lamk. 1816. Cellularia, sp. Flem. 1828. Bicellaria, sp. Blainv. 1830.

1. CANDA arachnoidea.

Canda arachnoidea, Lamx. Pol. Flex. 132. t. 2. fig. 6 (1816);
Zooph. 5. t. 64. figs. 19, 20; Blainv. Dict. Sc. Nat. lx. 421;
Man. Act. 457. t. 79. f. 2.

Cellularia Hookeri, Flem. Brit. Anim. 539 (1828); Johnst. Hist. Brit. Zooph. ed. 2. p. 338. t. 60. figs. 1, 2.

Bicellaria Hookeri, Blainv. Dict. Sc. Nat. lx. 424.

Cellaria filifera, Lamk. Hist. ii. 156 (1816), ed. 2. ii. 171.

a. Brit. Zooph. t. 60. figs. 1, 2. Orkney, E. Forbes, Esq. Presented by G. Johnston, M.D.

5. TRICELLARIA.

Tricellaria, Flem. B. A. 1828; Blainv. D. S. N. 1830. Cellaria, sp. Soland.; Lamk. Crisia, sp. Lamx. 1816. Cellularia, sp. Johnst.

TRICELLARIA ternata.

Cellaria ternata, Ellis and Soland. Zooph. 30. Sertularia ternata, Turt. Gmel. iv. 687. Crisia ternata, Lamx. Corall. Flex. 61.

Tricellaria ternata, Flem. Brit. Anim. 540; Blainv. Act. 458.
Cellularia ternata, Johnst. Hist. Brit. Zooph. ed. 2. p. 335. t. 59.

- a, b. On Plumularia. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.
- c. Separate fragment. Presented by G. Johnston, M.D.

6. BUGULA.

Bugula a, sp. Oken, Lehrb. Nat. 89, 1815 (type). Acamarchis, Lamx. 1816; Blainv. 1830. Crisia, sp. Lamx. 1812. Cellularia, sp. Pallas. Cellaria, sp. Soland.; Lamk. 1816.

1. BUGULA Neritina.

Remarkable Coralline, Ellis, Phil. Trans. abridg. x. 345. pl. 8. figs. a, A, G; Ellis, Corall. 35. pl. 19.

Sertularia Neritina, Linn. Syst. 1315; D. Chiaje, Anim. s. Vert. Nap. iv. 147; Esper, Sert. t. 13. figs. 1-3.

Cellularia Neritina, Pall. Elench. 67; Flem. Brit. Anim. 539; Johnst. Hist. Brit. Zooph. ed. 2. p. 340, t. 60, figs. 3, 4.

Cellaria Neritina, Ellis and Soland. Zooph. 22; Lamk. Anim. s. Vert. ed. 2. ii. 190; Esper, t. 13. figs. 1, 2, 3.

Bugula Neritina, Oken, Lehrb. Nat. 89.

Acamarchis Neritina, Lamx. Cor. Flex. 58. pl. 3. fig. 2; Zooph. 6; Risso, L'Europ. Mérid. v. 318; Blainv. Dict. Sc. Nat. lx. 423; Man. Act. 459. pl. 77. fig. 3.

Crisia Neritina, Lamx. Bull. Soc. Phil. 1812, iii. 183.

a. Large, reddish, B. Z. t. 60. figs. 3, 4. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

 Var. slender, transparent. Tynemouth. Presented by G. Johnston, M.D.

c, d. Var. siender, transparent. ———? Presented by G. Johnston, M.D.

e. Var. slender, transparent. ———? Presented by G. Johnston, M.D.

7. BUGULINA.

Bugulina, Gray, MSS. Cellularia, Van Beneden. Cellularia c, Johnst. 1847. Bugula β, Oken, Lehrb. Nat. 90, 1815.

1. BUGULINA avicularia.

Bird's-head Coralline, Ellis, Corall. 36. no. 2. pl. 20. fig. a, A. Cellularia avicularia, Pall. Elench. 68; Johnst. Brit. Zooph. 292. pl. 36. figs. 7, 8; Couch, Zooph. Cornw. 58; Corn. Faun. iii. 128; Van Beneden, Recherch. 41 & 48. pl. 6. figs. 1-8; Johnst. Hist. Brit. Zooph. ed. 2. p. 339. t. 63. figs. 7, 8.

Sertularia avicularia, Linn. Syst. 1315; Berk. Syn. i. 220.
Cellaria avicularia, Ellis and Soland. Zooph. 22; Lamk. Anim.
s. Vert. ed. 2. ii. 191; Johnst. Trans. Newc. Soc. ii. 26.

Bugula avicularia, Oken, Lehrb. Nat. 90.

Crisia avicularia, Lama. Bull. Soc. Phil. 1812, iii. 183; Cor. Flex. 141; Templeton, Mag. Nat. Hist. ix. 468.

Cellularia avicularis, Reid, Ann. & Mag. Nat. Hist. xvi. 389. a, b. Searborough, W. Bean, Esq. Presented by G. John-

ston, M.D.

Fam. 6. MICROPORIDE.

Microporidæ, Gray, Appendix, Proc. Zool. Soc. 1848.

1. MICROPORA.

Micropora, Gray, Appendix, Proc. Zool. Soc. 1848.

Discopora, sp. Lamk. Hist. Anim. s. Vert. 1816 (not the type); Lamx. Ency.; Blainv. Dict. Sc. Nat. lx. 1830; Man. Act. 445.

Cellepora, sp. Gmel.
Flustra, sp. Esper; Blainv. Man. Act. 446; M.-Edw. Lamk. Hist. ed. 2. ii. 251.

1. MICROPORA coriacea.

Flustra coriacea, Esper, Pflanz. Flust. t. 7. fig. 2; Johnst. Hist. Brit. Zooph. ed. 2. p. 349. t. 56. fig. 8.

Discopora coriacea, Lamk. Hist. ii., ed. 2. ii. 251; Lamx. Ency. Méth. 255; Blainv. Dict. Sc. Nat. lx. 411; Man. Act. 446. Flustra Latreillii, Audouin, Expl. i. 240, from Savigny, Egypt. Polypes, t. 19. fig. 8.

a, b. On shells. Sana Island. Presented by G. Johnston, M.D.

Fam. 7. CELLEPORIDÆ.

Celleporidæ, Gray, Syn. Brit. Mus. 1842, 135; Johnst. Brit. Zooph. ed. 1. 247, ed. 2. 295.

Escharidæ part., Johnst. Brit. Zooph. ed. 1. 247, ed. 2. 263. Crisiadæ part., Johnst. Brit. Zooph. ed. 1. 247, ed. 2. 263.

1. HIPPOTHOINA.

1. HIPPOTHOA.

Hippothoa, Lamx. Exp. Méth. 82, 1821; Johnst. Brit. Zooph. ed. 2. 291 (not Syn.).

Catenicella (part.), Blainv. 1830 (agrees with character), not M.-Edwards.

"Terebripora, D'Orbigny."

Tubulipora, sp. Jameson.

1. HIPPOTHOA catenularia.

Tubipora catenularia, Jameson, Wern. Mem. i. 561.

Tubipora catenulata, Stew. Elem. ii. 425.

Hippothoa catenularia, Flem. Brit. Anim. 534; Hassall, Ann. & May. Nat. Hist. vi. 170; Couch, Zooph. Cornw. 43; Corn. Faun. iii. 101. pl. 18. fig. 5; Johnst. Hist. Brit. Zooph. ed. 2. p. 291. t. 50, figs. 9, 10.

Hippothoa Elliotæ, Gray, Zool. Misc. 34.

a, b, c, d. On shells. Sana Island. Presented by G. Johnston, M.D.

e, f. Cork, with H. divaricata and Diastopora Obelia. Presented by G. Johnston, M.D.

2. HIPPOTHOA divaricata.

Hippothoa divaricata, Lamx. Expos. Méth. 82. t. 80. figs. 15, 16; Johnst. Hist. Brit. Zooph. ed. 2. p. 292. t. 51. figs. 3, 4.

Catenicella divaricata, Blainv. D. S. N. 1830, lx. 427; Man. Act. Hippothon lanceolata, Gray, Zool. Misc. 35; Hassall, Ann. & Mag. Nat. Hist. vii. 366. pl. 8. figs. 5, 6; Couch, Zooph. Cornw. 43; W. Thompson, Ann. Nat. Hist. v. 252; Couch, Corn. Faun. iii. 102. pl. 18. fig. 6.

a, e, f, g, h. Sana Island. Presented by G. Johnston, M.D. i. (H. lanceolata) with Lepralia verrucosa, L. reticulata, Peach. Presented by G. Johnston, M.D.

j, k, l. On worn Pectens. "H. lanceolata." Presented by G. Johnston, M.D.

Var. β. Cells contiguous on sea-weed.

b, c, d. Bootle, Cheshire, Ayrshire, and Ireland. Presented by G. Johnston, M.D.

3. HIPPOTHOA sica.

Hippothoa sica, Couch, Corn. Faun. iii. 102. pl. 19. fig. 8; Johnst. Hist. Brit. Zooph, ed. 2. p. 293. Inhab.

4. HIPPOTHOA cassiterides.

Hippothoa cassiterides, Couch, Johnst. Hist. Brit. Zooph. ed. 2. p. 476. fig. 87. Inhab.

2. LEPRALIANA.

4. CRIBRILINA.

Cribrilina, Gray, Appendix, Proc. Zool. Soc. 1838. Lepralia, sp. Hassall, Ann. Nat. Hist. viii. 368; Johnst. Brit. Zooph. ed. 2. 312.

l. Cribrilina punctata.

Lepralia arenacea, Bean, MS.

Lepralia punctata!, Hassall, Ann. & Mag. Nat. Hist. vii. 368. pl. 9. fig. 7; Johnst. Hist. Brit. Zooph. ed. 2. p. 312. t. 55. fig. 1. 478.

Lep. pedilostoma, Couch, Corn. Faun. iii. 113. pl. 22. fig. 14.

- a, b. On shell and stone. "L. arenacea." Presented by G. Johnston, M.D.
- c. On stone. Berwick. "L. arenacea." Presented by G. Johnston, M.D.
- d. On stone. "L. punctata." Presented by G. Johnston, M.D.
- e. On stone. "L. punctata!" with L. ansata. Cornwall, W. Peach, Esq. Presented by G. Johnston, M.D.
- f. On stone. Ayrshire, A. H. Hassall, Esq. Presented by G. Johnston, M.D.
- g. "L. arenacea, with Flustra lineata." Presented by G. Johnston, M.D.
- h. Lep. arenacea and L. pedilostoma. Presented by G. Johnston, M.D.

5. LEPRALIA.

Lepralia, Johnst. Brit. Zooph. ed. 1. 277, 1838, ed. 2. 302. Berenicea, Flem. Brit. An. 533, 1828; not Lamx. Exp. 80, 1821, nor Peron.

Escharina, sp. M.-Edw. Lamk. Hist. ed. 2. ii. 230. Escharoïde, sp. M.-Edw. Lamk. Hist. ed. 2. ii. 259? Cellepora, sp. Oken, Lehrb. Nat. 86, 1815.

1. LEPRALIA Jacotini.

Cellepora Jacotini, Aud. Expl. i. 238, from Savig. Egypt. Polyp. t. 7. fig. 8.

Lepralia tenuis, Hassall, Ann. & Mag. Nat. Hist. vii. 412; Johnst. Hist. Brit. Zooph. ed. 2. p. 303. t. 54. fig. 2.

L. vinca, Couch, Corn. Faun. iii. 116. pl. 22. fig. 7.

L. catenata, Peach, MSS.

- a. "L. catenata." Presented by G. Johnston, M.D. b. "L. catenata!" Presented by G. Johnston, M.D.

Var. a.—d. "The Alderman, Peach!" C. W. Peach, Esq. Presented by G. Johnston, M.D.

e, f, g, h. Sana Island. Presented by G. Johnston, M.D. ? i. On Fuci. C. W. Peach, Esq. Presented by G. Johnston, M.D.

2. Lepralia assimilis.

Lepralia assimilis, Johnst. Hist. Brit. Zooph. ed. 2. p. 304. Inhab. Dublin Bay, Hassall.

3. LEPRALIA simplex.

Lepralia simplex, Johnst. Hist. Brit. Zooph, ed. 2. p. 305. t. 54.

a.? On Lima. Sana Island. Presented by G. Johnston,

M.D.

- b. On shells with Lep. ventricosa, absorbing a slight pit in the surface. Sana Island. Presented by G. Johnston, M.D.
- c. With "Lep. tenuis, var." Presented by G. Johnston, M.D.
- d, e, f. "Lep. simplex!" Presented by G. Johnston, M.D.

4. LEPRALIA ventricosa.

Lepralia ventricosa, Hassall, Ann. & Mag. Nat. Hist. vii. 412; Johnst. Hist. Brit. Zooph. ed. 2. p. 305. t, 54. fig. 5.

a. On stone. Berwick Bay. Presented by G. Johnston,

M.D.

b, c, d, e. On shells. Presented by G. Johnston, M.D.

5. LEPRALIA ovalis.

Lepralia ovalis, Hassall, Ann. & Mag. Nat. Hist. ix. 413; Johnst. Hist. Brit. Zooph. ed. 2. p. 307. t. 56. fig. 1.

a. On Pholas. Presented by G. Johnston, M.D.

b, c. On Pholas with Lep. ovalis, L. annulata, and L. biforis. Presented by G. Johnston, M.D.

6. LEPRALIA 4-dentata.

Lepralia 4-dentata, Hassall, Ann. & Mog. Nat. Hist. vi. 171. pl. 6. fig. 5; Macgillivray, ibid. ix. 467; Johnst. Hist. Brit. Zooph. ed. 2. p. 309.

Inhab. Ireland, Hassall. Aberdeen, Macgillivray.

7. LEPRALIA granifera.

Lepralia granifera, Johnst. Hist. Brit. Zooph. ed. 2. p. 309. t. 54. fig. 7.

Flustra Montferrandi, Aud. Expl. i. 240, from Savig. Egypt. t. 9. fig. 14.

a. On slate. Berwick Bay. Presented by G. Johnston,

 On stone with Lep. punctata. Presented by G. Johnston, M.D.

c. Var. cell subannulate. On stone, Presented by G. Johnston, M.D.

8. LEPRALIA Landsborovii.

Lepralia Landsborovii, Johnst. Hist. Brit. Zooph. ed. 2. p. 310. t. 54. fig. 9.

a. On Pinna. Ayrshire, Rev. D. Landsborough. Presented by G. Johnston, M.D.

9. LEPRALIA auriculata.

Lepralia auriculata, Hassall, Ann. & Mag. Nat. Hist. ix. 412; Johnst. Hist. Brit. Zooph. ed. 2. p. 310. t. 54. fig. 8.

a. With Lep. coccinea. Presented by G. Johnston, M.D.

10. LEPRALIA pertusa.

Cellepora pertusa, Esper, Pflanz. Cellep. p. 149. t. 10. fig. 2. Lepralia pertusa, Johnst. Hist. Brit. Zooph. ed. 2. p. 311. t. 54. fig. 10.

Escharina pertusa, M.-Edwards, Lamk. Anim. s. Vert. ed. 2.

n. 232

Cellepora perlacea, W. Thompson, Ann. & Mag. Nat. Hist. x. 20.
Escharina perlacea, M.-Edwards, Lamk. Anim. s. Vert. ed. 2.
ü. 234.

a, b, c. Presented by G. Johnston, M.D.

d. On Lima. Sana Island. Presented by G. Johnston,

e. On stone with Lep. catenata and L. variolosa. Presented by G. Johnston, M.D.

f. With Lep. verrucosa. Presented by G. Johnston, M.D.

II. LEPRALIA figularis.

Lepralia figularis, Johnst. Hist. Brit. Zooph. ed. 2. p. 314. t. 56. fig. 2.

a. On shell with "Lep. variolosa." Presented by G.

Johnston, M.D.

12. LEPRALIA Peachii.

Lepralia Peachui, Johnst. Hist. Brit. Zooph. ed. 2, p. 315. t. 54. ügs. 5, 6.

a. On a Pecten "and another species." Presented by G.

Johnston, M.D.

 On shell with Lep. variolosa. Presented by G. Johnston, M.D.

c, d. With Tubipora orbiculus. Presented by G. Johnston,

? c. On shell with "Lep. reticulata." Presented by G. Johnston, M.D.

f. On shell with "Flustra lineata." Presented by G. Johnston, M.D.

13. LEPRALIA pedilostoma.

Flustra hibernica, Hassall, Ann. & Mag. Nat. Hist. vi. 172. pl. 7. fig. 1, & vii. 370. (The figure quoted "represents a posterior view of the cells, the wall of each cell posteriorly being absent.")

Cellepora? ovoidea, Lamx.?; Audouin, Expl. i. 238?, from Savig.

Egypt. Polypes, t. 8. fig. 1?

Lepralia pedilostoma, Hassall, Ann. & Mag. Nat. Hist. vii. 368. pl. 9. fig. 4; Johnst. Hist. Brit. Zooph. ed. 2. p. 315. t. 54. fig. 7.

Membranipora Peachii, Couch, Corn. Faun. iii. 120. pl. 22.

fig. 13.

a. Black-rock, Dublin. Presented by G. Johnston, M.D.

b. On Ostrea. Presented by G. Johnston, M.D. d. On Mytilus. Presented by G. Johnston, M.D.

e, f. On stone, Cornwall. Presented by G. Johnston, M.D.

g. On stone. Presented by G. Johnston, M.D.

h. On stone. Cornwall. Presented by G. Johnston, M.D.

i. On stone. Presented by G. Johnston, M.D.

j. On stone. Goran. Presented by G. Johnston, M.D. k. "L. pedilostoma!" Dublin Bay, A. H. Hassall, Esq. Presented by G. Johnston, M.D.

l, m, n, o. On stones. Presented by G. Johnston, M.D.

14. LEPRALIA reticulata.

Lepralia reticulata, J. Macgillivray, Ann. & Mag. Nat. Hist. ix. 467; Johnst. Hist. Brit. Zooph. ed. 2. p. 317. t. 55. fig. 10. a. On stone and shell. Presented by G. Johnston, M.D.

15. LEPRALIA fenestralis.

Lepralia fenestralis, Couch, Corn. Faun. iii. 117. pl. 22. fig. 8; Johnst. Hist. Brit. Zooph. ed. 2. p. 318. Inhab. Cornwall, R. Q. Couch.

16. LEPRALIA nitida.

Cellepora nitida, Fabr. Faun. Grænl. 435. no. 443.

Cellepora (Escharoide) nitida, M.-Edw. Lamk. Anim. s. Vert. ed. 2. ii. 259.

Berenicea nitida, Flem. Brit. Anim. 533.

Lepralia nitida, Johnst. Brit. Zooph. 277. pl. 34. fig. 7; Hassall, Ann. & May. Nat. Hist. vii. 367; W. Thompson, Ann. Nat. Hist. v. 253; Couch, Corn. Faun. iii. 114. pl. 22. fig. 3.

a. Presented by G. Johnston, M.D.

b, c. On shell. Presented by G. Johnston, M.D.

d. "Lep. nitida, var." Kirkwall Bay. Presented by G. Johnston, M.D.

e. On Modiola, "Lep. hyalina and Tubipora serpens." Presented by G. Johnston, M.D.

17. LEPRALIA innominata.

Lepralia innominata, Couch, Corn. Faun. iii. 114. pl. 22. fig. 4;
Johnst. Hist. Brit. Zooph. ed. 2. p. 320. t. 55. fig. 12.
Lep. pectinata, Peach, MS.

a. "L. pectinata." Goran, Sept. 1843. Presented by G. Johnston, M.D.

b. With L. catenata? and L. coccinea? Presented by G. Johnston, M.D.

c, d, e. "L. pectinata!" Sana Island. Presented by G. Johnston, M.D.

18. LEPRALIA semilunaria.

Lepralia semilunaris, Hassall, Ann. & Mag. Nat. Hist. ix. 411; Johnst. Hist. Brit. Zooph. ed. 2. p. 320. t. 56. fig. 4. Lep. pustulata?, Couch, Corn. Faun. iii. 113. pl. 22. fig. 2. Inhab. Dublin, Hassall.

19. LEPRALIA ciliata.

Eschara ciliata var. β , Pall. Elench. 38.

Cellepora ciliata Linn. Syst. 1286; Fabr. Faun. Grænl. 434. no. 441.

Berenicea utriculata, Flem. Brit. Anim. 533.

Lepralia ciliata, Johnst. Brit. Zooph. 279. pl. 34. fig. 6; Couch, Corn. Faun. iii. 118. pl. 22. fig. 10; W. Thompson, Ann. Nat. Hist. v. 253; J. Macgillivray, Ann. & Mag. Nat. Hist. ix. 467; Johnst. Hist. Brit. Zooph. ed. 2. p. 323. pl. 57. figs. 4, 5.

a. On Floridia, with Lepralia hyalina and Crisia eburnea. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

b, c. On Floridia. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

d. On Ulva. Presented by G. Johnston, M.D.

e. On Floridia. Ayrshire, Rev. D. Landsborough. Presented by G. Johnston, M.D.

f. Presented by G. Johnston, M.D.

g, h. On shells. Kirkwall Bay. Presented by G. Johnston, M.D.

i, j. On shells. Presented by G. Johnston, M.D.

20. LEPRALIA spinifera.

Lepralia ciliata, Hassall, Ann. & Mag. Nat. Hist. vi. 171, and vii. 367. pl. 9. fig. 2.

Lepralia spinifera, Johnst. Hist. B. Z. ed. 2. p. 324. t. 57. fig. 6.
a. On rock. Presented by G. Johnston, M.D.

21. LEPRALIA trispinosa.

Discopora trispinosa, Johnst. Edinb. Phil. Journ. xiii. 322.

Berenicea trispinosa, Johnst. Trans. Newc. Soc. ii. 268.

Lepralia trispinosa, Johnst. Brit. Zooph. 280. pl. 34. fig. 5; Couch, Corn. Faun. iii. 118; J. Macgillivray, Ann. & Mag. Nat. Hist. ix. 467; Johnst. Hist. B. Z. ed. 2. p. 324. t. 57. fig. 7.

a. C. W. Peach, Esq. Presented by G. Johnston, M.D. b. Berwick Bay. Presented by G. Johnston, M.D.

c. On a Cardium. Presented by G. Johnston, M.D.

d.? "L. trispinosa?" Presented by G. Johnston, M.D.

22. LEPRALIA annulata.

Cellepora annulata, Fabr. Faun. Grænl. 436. no. 444; Turt. Gmel. iv. 641.

Lepralia annulata, Johnst. Hist. Brit. Zooph. ed. 2. p. 313. t. 55. figs. 2, 3.

Cellepora (Escharoide) bimucronata, Lamx. Corall. 41; Lamk. Anim. s. Vert. ed. 2. ii. 260.

Eschara bimucronata, Moll. Eschara, 65. t. 3. fig. 18.

a, b, c, d, e, f. On Fuci. Presented by G. Johnston, M.D.
 g, h. On Fuci with "L. ciliata β. insignis." Presented by G. Johnston, M.D.

i, j, k, l. On shell. Sana Island. Presented by G. Johnston, M.D.

m, n. With Lep. ciliata? and L. ovalis? Presented by G. Johnston, M.D.

o, p. With L. tenuis. Presented by G. Johnston, M.D.

 Q. On Fuci with Lep. hyalina. Presented by G. Johnston, M.D.

6. HERENTIA.

Herentia, Gray, Appendix; Proc. Zool. Soc. 1848.

* Ovarian? tube lateral, crust irregular.

1. HERENTIA Hyndmanni.

Lepralia Hyndmanni, Johnst. Hist. Brit. Zooph. ed. 2. p. 306. t. 54. fig. 6.

- a. With Lep. appensa, Hass. Presented by G. Johnston, M.D.
- b, c, d. Sana Island. Presented by G. Johnston, M.D.

2. HERENTIA insignis.

Lepralia insignis, Hassall, Ann. & Mag. Nat. Hist. vii. 368. t. 9. fig. 5; Couch, Corn. Faun. t. 22. fig. 11; J. Macgillivray, Ann. & Mag. Nat. Hist. ix. 467.

Lepralia ciliata var. β, Johnst. Brit. Zooph. ed. 2. 323.

Flustra Dutertrei, Aud. Expl. from Savig. Egypt. Rept. t. 9. fig. 2?

Escharina vulgaris part., M.-Edw. Lamk. Hist. ed. 2. 231?

- a. (L. insignis!), Fowey, 1846. Presented by G. Johnston, M.D.
- b, c, d. (L. ciliata var. insignis.) Presented by G. Johnston, M.D.
- With Lep. annulata on Fuci. Presented by G. Johnston, M.D.
 - ** Ovarian? tube lateral, crust circular.

3. HERENTIA linearis.

Lepralia linearis, Hassall, Ann. & Mag. Nat. Hist. vii. 368. pl. 9. fig. 8; Johnst. Hist. Brit. Zooph. ed. 2. p. 308. t. 54. fig. 11.

a, b. On shell. Presented by G. Johnston, M.D.

*** Ovarian? tube anterior, central.

4. HERENTIA biforis.

Cellepora Macry, W. Thompson, Ann. & Mag. Nat. Hist. x. 20; not Chiaje? nor M.-Edwards.

Lepralia biforis, Johnst. Hist. Brit. Zooph. ed. 2. p. 314.

a. On inside of Pectunculus with Flustra foliacea. Presented by G. Johnston, M.D.

b, c. On shells. Presented by G. Johnston, M.D.

d, e, f, g. On shell and rock. Presented by G. Johnston, M.D.

h. With "Lep. auriculata"? Presented by G. Johnston, M.D.

7. ESCHARINA.

Escharina, M.-Edw. Lamk. Hist. ed. 2. 231, 1836 (type E. vulgaris); Gray, Proc. Zool. Soc. 1848.

Escharoide, sp. M.-Edw. Lamk. Hist. ed. 2. 259.

Lepralia, sp. Johnst. Brit. Zooph. ed. 2. 278.

Berenicea, sp. Johnst.

* Mouth unarmed. ESCHARINA.

1. ESCHARINA Ballii.

Lepralia Ballii, Johnst. Hist. Brit. Zooph. ed. 2. p. 321. t. 56. fig. 5.

a, b, c. On Lima and Pecten. Sana Island. Presented by G. Johnston, M.D.

d. On Venus with Lep. biforis. Presented by G. Johnston,

e, f. On Lima. Sana Island. Presented by G. Johnston, M.D.

2. ESCHARINA absata.

Lepralia ansata, Johnst. Hist. Brit. Zooph. ed. 2. p. 307. t. 54. fig. 12.

a. "L. ansata!" with Flustra lineata and L. punctata! Cornwall, W. Peach, Esq. Presented by G. Johnston, M.D.

3. ESCHARINA unicornis.

Berenicea coccinea, Johnst. Trans. Newc. Soc. ii. 267. pl. 12. fig. 5.

Lepralia coccinea, Johnst. Brit. Zooph. 278. pl. 34. figs. 1-3; Hassall, Ann. & Mag. Nat. Hist. vii. 367; Couch, Corn. Faun, iii. 115; W. Thompson, Ann. Nat. Hist. v. 253.

Lepralia unicornis, Johnst. Hist. Brit. Zooph. ed. 2. p. 321.

t. 57. fig. 1.

a, b, c, d, e, f, g, h. On stone. Presented by G. Johnston, M.D.

i. On slate. Presented by G. Johnston, M.D.

** Mouth spinose. ESCHAROIDES.

4. ESCHARINA coccinea.

Cellepora coccines, Abildgaard, Müll. Zool. Dan. iv. 30. t. 146, figs. 1, 2,

Cellepora (Escharoide) coccinea, Lamk. Anim. s. Vert. ed. 2. ii.

Berenicea coccinea, Flem. Brit. Anim, 533.

Lepralia coccinea, Johnst. Hist. Brit. Zooph. ed. 2. p. 322, t. 57. figs. 2, 3.

Lepralia tridentata, Couch, Corn. Faun. 115. pl. 22. fig. 5.

Var. \(\beta\), with a triangular slit or loop on each side of the aperture.
Lepralia appensa, Hassall, Ann. \(\delta\) Mag. Nat. Hist. vii, 367.
pl. 9. fig. 3.

a. Var. on Floridea. Presented by G. Johnston, M.D.

b. On Nullipora. Presented by G. Johnston, M.D.
 c. With Flustra? lineata, Lepralia immersa, and L. coccinea,
 Presented by G. Johnston, M.D.

- d. "Lep. appensa, Hass.! with Lep. coccinea." Cornwall. Presented by G. Johnston, M.D.
- e, f. "Lep. coccinea, Müll." Presented by G. Johnston, M.D.
- g. "Lep. coccinea var. β." Presented by G. Johnston, M.D.
- k, i. "Lep. coccines, Müller!" Presented by G. Johnston,
- j. "Lep. coccinea, L. appensa." Presented by G. John ston, M.D.

8. ESCHARELLA.

Escharella, Gray, Appendix; Proc. Zool. Soc. 1848. Lepralia, sp. Johnst. Brit. Zooph. ed. 1. 280, ed. 2. 325. Berenicea, sp. Flem. Brit. Anim. 533, 1828; Johnst.

1. Escharella immersa.

Berenicea immersa, Flem. Brit. Anim. 533.

Berenicea flava, Johnst. Trans. Newc. Soc. ii. 268.

Lepralia immersa, Johnst. Brit. Zooph. 280. pl. 34. fig. 8; W. Thompson, Ann. Nat. Hist. v. 253; Couch, Corn. Faun. iii. 118; Johnst. Hist. Brit. Zooph. ed. 2. p. 325. t. 57. fig. 8.

- a. "Berenicea flava, Johnst." Berwick Bay. Presented by G. Johnston, M.D.
- b. "L. immersa." Presented by G. Johnston, M.D.

c. Presented by G. Johnston, M.D.

- d. Goran. Presented by G. Johnston, M.D.
- e, f. Presented by G. Johnston, M.D. g. On shell. Presented by G. Johnston, M.D.

2. Escharella violacea.

Lepralia violacea, Johnst. Hist. Brit. Zooph. ed. 2. p. 325. t. 57. fig. 9.

a. On stone. Presented by G. Johnston, M.D.

b. On stone. Isle of Man. Presented by G. Johnston, M.D.

3. ESCHARELLA variolosa.

Lepralia variolosa, Johnst. Brit. Zooph. 278. pl. 34. fig. 4; Hassall, Ann. & Mag. Nat. Hist. vii. 367; Couch, Zooph. Cornw. 50; Corn. Faun. iii. 116. pl. 22. fig. 6; W. Thompson, Ann. Nat. Hist. v. 253; Johnst. Hist. Brit. Zooph. ed. 2. p. 317. t. 55. figs. 8, 9.

Var. a. Lip sinuated on the proximal margin, Johnst. Brit. Zooph.

ed. 2. 317. t. 55. fig. 8.

Var. 3. Lip with a denticle on the proximal margin, Johnst. Brit. Zooph. ed. 2. 317. t. 55. fig. 9.

a. On Pholas, with L. tenuis and L. ——? Presented by G. Johnston, M.D.

b, c, d. On shell. Berwick Bay. Presented by G. Johnston, M.D.

e. On rock, with Lep. nitida, L. catenata, L. flava. Presented by G. Johnston, M.D.

f. On stone. Presented by G. Johnston, M.D.

g. (h.?) On shells. Presented by G. Johnston, M.D.

9. DISCOPORA.

Discopora, Lamk. Hist. ii. 164, ed. 2. ii. 248 (type D. verrucosa); Lamx. Expos. Méthod. 42 (type D. verrucosa); Blainv. Mon. Act. 446; not Fleming nov Johnston.

Lepralia, sp. Johnst. Brit. Zooph. ed. 2. 316.

1. DISCOPORA VEITUCOSA,

Cellepora verrucosa, Esper, Cellep. t. 2. figs. 1, 2; not Discopora verrucosa, Lamk. Hist. ii. 164, ed. 2. ii. 248.

? Lepralia Johnstoni, Bean, MSS.

Lepralia verrucosa, W. Thompson, Ann. Nat. Hist. xiii. 441: Johnst. Hist. Brit. Zooph. ed. 2. p. 316. t. 56. fig. 3.

Lepralia reticulata, Couch, Corn. Faun. iii. 117. pl. 22, fig. 9.
a. On an old shell with Hippothos lanceolata. Presented by G. Johnston, M.D.

b. On wood. Presented by G. Johnston, M.D.

2. Discopora bispinosa.

Lepralia bispinosa, Johnst. Hist. Brit. Zooph. ed. 2. p. 326. t. 57. fig. 10.

a. Presented by G. Johnston, M.D.

10. ESCHARA.

Eschara, Ray; Fleming, Brit. Anim. 531; Johnst. Brit. Zooph. ed. 1. 297, ed. 2. 350; Lamk. Syst. 375, Hist. ü. 173, ed. 2. 265.

Eschara, sp. Pallas, Zooph. 40.

Nullipora, sp. Solander. Cellepora, sp. Esper.

1. ESCHARA foliacea.

Eschara retiformis, Raii Syn. 1. 31; Flem. Brit. Anim. 531. Stony foliaceous Coralline, Ellis, Corall. 71. no. 3, pl. 30. fig. a, A, B, c; Borl. Cornw. 239. pl. 24. fig. 6.

Eschara fascialis, Pall. Elench. 44.

Millepora foliacea, Ellis and Soland. Zooph. 133. Cellepora lamellosa, Esper, Cellep. p. 146. t. 6. figs. 1-5. Eschara foliacea, Lamk. Anim. s. Vert. ii. 174, ed. 2. ii. 266;
Blainv. Actinol. 428. pl. 75. fig. 3; Milne-Edwards, Ann. des Sc. Nat. vi. 36. pl. 3. fig. 1; Couch, Zooph. Cornw. 60; Corn. Fann. iii. 131; Johnst. Hist. Brit. Zooph. ed. 2. p. 351. t. 67.
a, b. Coast of Sussex. Presented by G. Mantell, LL.D.

2. ESCHARA fascialis.

Italian Coral, Ellis, Corall. 72. pl. 30. fig. b.

Eschara fascialis var. a, Pall. Elench. 42; Lamk. Anim. s. Vert. ii. 175, ed. 2. ii. 267; Flem. Brit. Anim. 531; Johnst. Hist. Brit. Zooph. ed. 2. p. 352.

Millepora teenialis, Ellis and Soland. Zooph. 133.

M. fascialis, Berk. Syn. i. 211; Turt. Brit. Faun. 204.

Cellepora ligulata, Esper, Cellep. 146. t. 8. figs. 1, 2.

L'Eschare à bandelettes, Blainv. Act. 428; M.-Edw. Ann. des Sc. Nat. Part. Zool. vi. 43. pl. 4. fig. 1.

a, b. Dr. Leach's Collection.

3. ESCHARA cribraria.

Eschara cribraria, Johnst. Hist. Brit. Zoopk. ed. 2. p. 352. t. 60. figs. 7-9.

a. Berwick Bay, 1844. Presented by G. Johnston, M.D.

11. PORELLA.

Porella, Gray, Appendix, Proc. Zool. Soc. 1848.

Porus, Borlase.

Eschara, sp. Pallas, Zooph.; Lamk. Syst. 375; Hist. ii. 174; Lamz.

Cellepora, sp. Johnston.

1. Porella cervicornis.

Porus cervinus, Borl. Cornw. 240. t. 24. fig. 7.

Millepora cervicornis, Soland. 134; Stew. Elem. ii. 427; Turt. Brit. Faun. 204.

M. compressa, Sowerby, Brit. Misc. 83. pl. 41; Turt. Brit. Faun. 204; Jameson, Wern. Mem. i. 560.

Cellepora cervicornis, Flem. Brit. Anim. 532; Thompson, Ann. Nat. Hist. v. 253; Couch, Zooph. Cornw. 49; Corn. Faun. iii. 111. pl. 20. fig. 1; Johnst. Hist. Brit. Zooph. ed. 2. p. 299. t. 53.

Millepora alcicornis, Esper, Millep. t. 5, 6, 7.

Eschara cervicornis, Oken, Lehrb. Nat. 86?; Lamk. Hist. ii. 174. ed. 2. ii. 267.

a. Cork. Presented by Miss Elliot.

b, c. Shetland. Presented by P. Neil, Esq.

d. — ?

12. CELLEPORINA.

Celleporina, Gray, Appendix, Proc. Zool. Soc. 1848. Lepralia, sp. Johnst. Brit. Zooph, ed. 2, 304. Cellepora, sp. Hassall.

1. CELLEPORINA Hassallii.

Cellepora bimucronata, Hassall, Ann. & Mag. Nat. Hist. vii. 367. pl. 9, fig. 1; not Lamx.

Lepralia Hassallii, Johnst. Hist. Brit. Zooph. ed. 2. p. 304

t. 54. fig. 3. 477.

a. On a Patella. Presented by G. Johnston, M.D.

13. CELLEPORELLA.

Celleporella, Gray, Appendix; Proc. Zool, Soc. 1848. Cellepora, sp. Linn.; Lamx. Coral. 383. Berenicea, sp. Hassall; not Lamx. Lepralia, sp. Johnst. Brit. Zooph.

1. CELLEPORELLA hyalina.

Cellepora hyalina, Linn. Syst. 1286; Fabric. Faun. Grænl. 435. no. 442; Esper, Cellep. t. 1. figs. 1, 2; Lamx. Corall. 38; Bosc, Vers, iii. 148; Oken, Lehrb. Nat. 86; not Cavolini nor Chiaje.

Berenicea hyalina, Hassall, Ann. & Mag. Nat. Hist. vii. 367. Cellepora personata, Chiaje, Mem. iii. 39. t. 34. figs. 17, 18, ova-

rian cell.

Lepralia hyalina, W. Thompson, Ann. Nat. Hist. v. 253; Johnst. Hist. Brit. Zooph. ed. 2. p. 301. t. 54. fig. 1.

Var. β. Wall of the cells thicker, calcareous and opake.

Lepralia cylindrica, Hassall, Ann. & Mag. Nat. Hist. vii. 368. pl. 9. fig. 6.

Var. y. Cells heaped, usually opake and calcareous.

Cellepora ovoidea, Lamx. Corall. 38. pl. 1. fig. 1; Blainv. Act. 444; Lamk. Anim. s. Vert. ed. 2. ii. 259; Lamx. Exp. Meth. 2. t. 64. figs. 4, 5; D. Chiaje, Anim. s. Vert. Nap. iii. 38 t. 34. fig. 33.

a. On Fuci. Ireland, W. Thompson, Esq. Presented by

G. Johnston, M.D.

b, c, d. On Fuci. Presented by G. Johnston, M.D.

e. With ovarian capsules on Fuci. Presented by G. Johnston, M.D.

f. On Floridea. Presented by G. Johnston, M.D.

g. On Floridea, "Tubulipora hyalina, Couch." Cornwall, C. W. Peach, Esq. Presented by G. Johnston, M.D.

h. On Floridea. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

- i. On Floridea. Bangor, co. Down, W. Thompson, Esq. Presented by G. Johnston, M.D.
- On Floridea. Ireland, with Lepralia ciliata and Crisia eburnea. Presented by G. Johnston, M.D.

k, l. On Fuci. Presented by G. Johnston, M.D.

- m, n. Fowey Harbour, 1845. Presented by G. Johnston, M.D.
- o. On Algæ. Presented by G. Johnston, M.D.
- p. ——? Presented by G. Johnston, M.D.

14. CELLEPORA.

Cellepora, sp. O. Fab.; Johnst. Brit. Zooph. ed. 2. 295. Spongites, Oken, Lehrb. Nat. 85, 1815.

1. Cellepora pumicosa.

Porous Eschara, Ellis, Corall. 75. no. 7. pl. 27. fig. f, F. & 72. pl. 30. fig. d, D.

Tubipora verrucosa, Linn. Syst. ed. 10, 789.

Cellepora pumicosa, Linn. Syst. 1286; Müll. Zool. Dan. Prod. 253; Berk. Syn. 1. 212; Stew. Elem. ii. 428. pl. 12. figs. 16, 17, copied from Ellis; Lamk. Anim. s. Vert. ii. 170, ed. 2. ii. 256; Lamx. Corall. 40; Flem. Brit. Anim. 532; Johnst. Trans. Newc. Soc. ii. 267; Templeton, Mag. Nat. Hist. ix. 469; Couch, Zooph. Cornw. 48; Corn. Faun. iii. 110. pl. 20. figs. 4, 5; Johnst. Hist. Brit. Zooph. ed. 2. p. 295. t. 52. figs. 1, 2, 3. C. verrucosa, Linn. Syst. 1286; Fabric. Faun. Grænl. 434; Oliv. Zool. Adriat. 229.

C. spinosa, Turt. Brit. Faun. 205.

Millepora pumicosa, Pall. Elench. 254; Ellis and Soland. Zooph. 135; Jameson, Wern. Mem. i. 560; Stew. Elem. ii. 428. Flustra bullata?, Ellis and Soland. Zooph. 16; Stew. Elem. ii. 436. Madrepora verrucaria, Esper, Madrep. t. 17. figs. c, C, & b, B,

is young.

- b, c. On Natica. Presented by G. Johnston, M.D.
 Presented by G. Johnston, M.D.
- d. Shetland. Presented by Dr. P. Neill.

2. Cellepora ramulosa.

Cellepora ramulosa, Linn. Syst. 1285; Müll. Zool. Dan. Prod. 253; Flem. Brit. Anim. 532; Johnst. Trans. Newc. Soc. ii. 267. pl. 12. figs. 3, 4; Lamk. Anim. s. Vert. ed. 2. ii. 258; Thompson, Ann. & Mag. Nat. Hist. vii. 481; Hassall, ibid. vii. 367; Couch, Zooph. Cornw. 49; Corn. Faun. iii. 110. pl. 20. fig. 2; Macgilliv. Ann. & Mag. Nat. Hist. ix. 467; Johnst. Hist. Brit. Zooph. ed. 2. p. 296. t. 52, figs. 4. 5.

Cellepora pumicosa var., Pallas, Elench. 255; Ellis and Soland. Zooph. 136.

Cellepora lævis, Macgilliv. Ann. & Mag. Nat. Hist. ix. 467. a, b. Berwick Bay. Presented by G. Johnston, M.D.

3. CELLEPORA Skenei.

Millepora Skenei, Ellis and Soland. Zooph. 135; Turt. Brit. Faun. 204; Stew. Elem. ii, 427.

Cellepora palmata, Flem. Brit. Anim. 532.

C. Skenei, Johnst. Trans. Newc. Soc. ii. 267; Couch, Zooph. Cornw. 49; Corn. Faun. iii. 111; W. Thompson, Ann. & Mag. Nat. Hist. xv. 322; Johnst. Hist. Brit. Zooph. ed. 2. p. 297. t. 52. figs. 6, 7, 8.
Inhab.

4. CELLEPORA lævis.

Cellepora lævis, Flem. Brit. Anim. 532; Couch, Zooph. Corne. 50; Corn. Faun. iii. 112; Johnst. Hist. Brit. Zooph. ed. 2. p. 299.

Eschara lævis, Blainv. Act. 428.

C. ramulosa var., Johnst. Brit. Zooph. 300. Inhab.

5. CELLEPORA vitrina.

Cellepora vitrina, Couch, Corn. Faun. iii. 109. pl. 22. fig. 1.

3. RETEPORANA.

15. RETEPORA.

Retepora, Lamk.; Johnst. Brit. Zooph. ed. 2. 353. Frondipora, Oken, Lehrb. Nat. 63, 1815; Blainv. 1830.

1. RETEPORA reticulata.

Millepora Retepora, Borl. Cornw. 240. pl. 24. fig. 8.

Millepora reticulata, Linn. Syst. 1284; Fabric. Faun. Grænl. 433; Ellis and Soland. Zooph. 138; Esper, Pflanz. t. 2. figs. 1-5; Oliv. Zool. Adriat. 223.

M. Frondipora, Pall. Elench. 241.

Retepora reticulata, Lamk. Anim. s. Vert. ii. 182, ed. 2. ii. 275; Risso, L'Europ. Mérid. v. 343; Flem. Brit. Anim. 531; Stark, Elem. ii. 435; Blainv. Act. 633; Couch, Corn. Faun. iii. 130; Johnst. Hist. Brit. Zooph. ed. 2. p. 353.

Frondipora reticulata, Blainv. ibid. 406. pl. 69. fig. 1.

Frondipora clathrata, Oken, Lehrb. Nat. 64.

Millepora cellulosa, Jameson, Wern. Mem. i. 560; Turt. Brit. Faun. 205; Stew. Elem. ii. 427.

Millepora foraminosa, Ellis and Soland. Zoopk. 138. pl. 26. fig. 2. Retepora cellulosa, Johnst. Loud. Mag. Nat. Hist. vii. 638. fig. 69; S. V. Wood, Ann. & Mag. Nat. Hist. xiii. 16; W. Thompson, ibid. xv. 322.

Retepora Beaniana, King, Ann. & Mag. Nat. Hist. xviii. 237; Johnst. Hist. Brit. Zooph. ed. 2. p. 353. fig. 67.

Frondipora cellulosa, Oken, Lehrb. Nat. 63.

a, b. Northumberland, from Mr. Howie's collection.

4. Salicornarana.

SALICORNABIA.

Salicornaria, Cuv. R. A. 1837; Johnst. Brit. Zooph. ed. 2. 355. Parcimia, Flem. Brit. Anim. 534; Johnst. Brit. Zooph. ed. 1. Cellaria a, Lamk. Syn. 1801, 1812; Lamz. 1812; Blainv. 1830.

SALICORNARIA farciminoides.

Salicornaria farciminoides, Johnst. Hist. Brit. Zooph. ed. 2. p. 355. t. 66. figs. 6, 7.

Corallina fistulosa fragilis, Raii Hist. i. 65.

Corallina fistulosa fragilis, internodiis prælongis lævibus, albis, farciminum modo catenatis, Pluken. Phytog. pl. 26. fig. 2. Bugle Coralline, Ellis, Corall. 46. no. 1. pl. 23. figs. a, A, B, C. Eschara fistulosa, Linn. Syst. ed. 10. 804.

Cellularia Salicornia, Pall. Elench. 61.

Tubularia fistulosa, Linn. Syst. 1302; Oliv. Zool. Adriat. 267; Berk. Syn. i. 214.

Cellaria farciminoides, Ellis and Soland. Zooph. 26.

Isis Hippuris, Fabr. Faun. Grænl. 427.

Cellaria Salicornia, Lamk. Anim. s. Vert. ii. 135, ed. 2. ii. 176; Bosc, Vers, iii. 129. pl. 28. fig. 6; Lamx. Expos. Méthod. 5; Corall. 55; Bull. Soc. Phil. iii. 185; Blainv. Act. 455. pl. 77. fig. 1.

Salicorniaires, Cuv. Règ. Anim. iii. 303.

Salicornaria dichotoma, Schweig. Handb. 428.

Salicornaria fistulosa, Templeton, Mag. Nat. Hist. ix. 469.

Farcimia fistulosa, Flem. Brit. Anim. 534; Johnst. Trans. Newc. Soc. ii. 266.

Cellaria fistulosa, S. V. Wood, Ann. & Mag. Nat. Hist. xiii. 17. Farcimia Salicornia, Johnst. Brit. Zooph. 295. pl. 37. figs. 6, 7; Couch, Zooph. Cornw. 58; Corn. Faun. 129. pl. 20. fig. 3. a. England. Presented by G. Johnston, M.D.

- b. Zetland, "E. Forbes, Esq." Presented by G. Johnston,
- c. Presented by G. Johnston, M.D.
- d. Ayrshire. Presented by G. Johnston, M.D. e. In spirits. Presented by G. Johnston, M.D.

2. Salicornaria siduosa.

Tubularia fistulosa, Esper, Tubul. t. 2, figs. 1-4.

Farcimia sinuosa, Hassall, Ann. & Mag. Nat. Hist. vi. 172. pl. 6. figs. 1, 2; Macgilliv. ibid. ix. 468.

Farcimia spathulosa, Hassall, ibid. xi. 112.

Salicornaria sinuosa, Johnst. Brit. Zooph. ed. 2. p. 356.t. 66. fig. 8. a. Fragment. Coast of England. Presented by G. John-

ston, M.D.

b. Fragment. Coast of England? Presented by G. Johnston, M.D.

Fam. S. SCUPARIADÆ.

Eucratiadæ, Johnst. Brit. Zooph. ed. 2, 288. Crisiadæ part., Gray, Syn. Brit. Mus. 1842, 135.

1. SCUPARIA.

Scuparia a, Oken, Lehrb. Nat. 90, 1815.

Eucratea, Johnst. Brit. Zooph. ed. 2. 289.

Eucratea, sp. Lamx. Bull. Soc. Phil. iii. (1812); Flem, 1828. Unicellaria, sp. Blainv. Dict. Sci. Nat. lx. (1830).

1. SCUPARIA chelata.

Bull's-horn Coralline, Ellis, Corall. 42. no. 9. pl. 22. fig. b, B. Sertularia chelata, Linn. Syst. ed. 10. 816.

Cellularia chelata, Pall. Elench. 77.

Sertularia loricata, Linn. Syst. 1316; Berk. Syn. i. 220; Esper, Pflanz. Sert. t. 29. figs. 1, 2; Turt. Gmel. iv. 686; Turt. Brit. Faun. 217; Stew. Elem. ii. 449.

Cellaria chelata, Ellis and Soland. Zooph. 25; Bosc, Vers, iii.

134; Lamk. Anim. s. Vert. ii. 140, ed. 2. ii. 189.

Eucratea chelata, Lamx. Bull. Soc. Phil. 1812, iii. 184; Corall. 64. pl. 3. fig. 5; Expos. Méthod. 8. pl. 65. fig. 10; Johnst. Hist. Brit. Zooph. ed. 2. p. 289.

Scuparia chelata, Oken, Lehrb. Nat. 90. Eucratea loricata, Flem. Brit. Anim. 541.

Eucratée cornée, M.-Edw. Ann. d. Sc. Nat. n. s. ix. 204. pl. S. fig. 1.

Unicellaria chelata, Blainv. Act. 461. pl. 77. fig. 2.

Crisia chelata, Johnst. Brit. Zooph. 261; Reid, Ann. & Mug. Nat. Hist. xvi. 392; Couch, Corn. Faun. iii. 98. pl. 18. fig. 1.

- Dry, on paper. Bangor, co. Down, W. Thompson, Esq. Presented by G. Johnston, M.D.
- b, c. Dry, on Fuci. Coast of England. Presented by G. Johnston, M.D.
- d. Dry, on Fuci, with Sertularia pumila and S. polyzonias. Presented by G. Johnston, M.D.
- e. Dry, on a crab. Presented by G. Johnston, M.D.
- f. In spirits, with Pedicellaria echinata. Presented by G. Johnston, M.D.

2. ÆTEA.

Ætea, Lamx. 1812 (Bull. Soc. Phil.), char. Anguinaria, Lamk. 1812 (no char.); Johnst. Br. Zooph. ed. 2. 292. Falcaria β, Oken, Lehrb. Nat. 91, 1815.

1. ÆTEA Anguina.

Snake Coralline, Ellis, Corall. 43. no. 11. pl. 22. fig. c, C, D.
Sertularia Anguina, Linn. Syst. ed. 10. 816; Linn. Syst. 1317;
Turt. Gmel. iv. 686; Berk. Syn. i. 220; Turt. Brit. Faun. 217;
Stew. Elem. ii. 449; Esper, Pflanz. Sert. t. 16. figs. 1, 2;
Oliv. Zool. Adriat. 291.

Cellularia Anguina, Pall. Elench. 78; Ellis, Phil. Trans. lvii. 437. pl. 19. fig. 10; Hogg's Stock. 35.

Cellaria Anguina, Ellis and Soland. Zooph.26; Bosc, Vers, iii. 135. Etea Anguina, Lamx. Bull. Soc. Phil. 1812, iii. 184; Corall. 65. pl. 3. fig. 6; Expos. Méthod. 9. t. 65. fig. 15.

Falcaria Anguina, Oken, Lehrb. Nat. 91.

Sertularia mollis, D. Chiaje, Anim. s. Vert. Nap. iv. 147.

Anguinaria Anguina, Flem. Brit. Anim. 542; Lister, Phil. Trans. 1834, 385. pl. 12. fig. 4; Blainv. Act. 467. pl. 79. fig. 3.

Anguinaria spatulata, Lamk. Anim. s. Vert. ii. 143, ed. 2. ii. 196; Stark. Elem. ii. 439; Thompson, Ann. Nat. Hist. v. 252; Couch, Zooph. Cornw. 44; Corn. Faun. iii. 103. pl. 19. fig. 2; Johnst. Hist. Brit. Zooph. ed. 2. p. 290. t. 50. figs. 7, 8.

a. Dry, on Fucidæ. Youghal, Miss Ball. Presented by G. Johnston, M.D.

b, c. Dry, on Fucidæ. Bristol. Presented by G. Johnston, M.D.

3. Gemellaria.

Gemellaria, Savigny, 1805?; Van Beneden; Johnst. B. Z. 293. Gemicellaria, Blainv. 1830.

Loricaria, Lamx. Expos. 7 (1821), not Lacép.

Notamia, Flem. Brit. Anim. 1828.

Loricula, Cuvier, 1836. Crisia, sp. Lamx. 1816; Lamk. 1816.

Scuparia B, Oken, Lehrb. Nat. 90, 1815.

1. GEMELLARIA loriculata.

Museus coralloides, Doody, Raii Syn. i. 34. no. 6.

Coat-of-mail Coralline, Ellis, Corall. 40. no. 7. pl. 21. fig. b, B.

Sertularia loricata, Linn. Syst. ed. 10. 815.

Cellularia loriculata, Pall. Elench. 64; Hogg's Stock. 35.

Sertularia loriculata, Linn. Syst. 1314; Turt. Gmel. iv. 684; Berk. Syn. 1. 219; Esper, Pflanz. Sert. t. 24. figs. 1-3; Turt. Brit. Faun. 216; Jameson, Wern. Mem. i. 564; Stew. Elem. ii. 447.

Cellaria loriculata, Ellis and Soland. Zooph. 24; Bosc, Vers. iii. 133; Lamk. Anim. s. Vert. ii. 136, ed. 2. ii. 179; Johnst.

Trans. Newc. Soc. ii. 262.

Scuparia loricata, Oken, Lehrb. Nat. 90. Crisia loriculata, Lamx. Corall. Flex. 140. Loricaria europea, Lamx. Expos. Méthod. 7.

Notamia loriculata, Flem. Brit. Anim. 541; Farre, Phil. Trans. 1837, 413. pl. 27. figs. 6-9; Hassall, Ann. & Mag. Nat. Hist. vi. 170; Couch, Zooph, Cornw. 42; Corn. Faun. iii. 101. pl. 18. fig. 4.

Loricula loricata. Cuvier, Règ. Anim. ed. 2. iii. 303; Templeton,

Mag. Nat. Hist. ix. 469.

Gemicellaria loriculata, Blainv. Dict. Sci. Nat. lx. 425; Actinol.

461. pl. 78. fig. 4.

Gemellaria loriculata, Savig. Egypt. Polyp.; Van Beneden, Recherch. 33. pl. 5. fig. 1; Johnst. Hist. Brit. Zooph. ed. 2. p. 293. t. 47. figs. 12, 13. 477.

a. Dry, on paper. Northumberland. Presented by G. Johnston, M.D.

b, c, d, e. Dry, on paper. Berwick Bay. Presented by G.

Johnston, M.D.

f. Frith of Forth. Presented by G. Johnston, M.D.

g, h. Dry, on paper. Cork, J. V. Thompson, Esq. Presented by G. Johnston, M.D.

i, l. River Tay. Presented by Capt. Ducane, R.A. k. ——? Presented by G. Johnston, M.D.

Suborder II. TUBULIPORINA.

Tubuliporina, Johnst. Hist. Brit. Zooph. ed. 2. p. 264. Les Tubuliporiens, Milne-Edwards, Mêm. sur les Crisies, p. 14. Tubuliporide. Johnst. Trans. Berw. Nat. Club, 107. Auliporina, Ehrenberg, Corall. des Roth. Meer. 153.

Fam. 9. CRISIADE.

Les Crisies, Milne-Edwards, Mém. 1-13; Savig. Egypt. Polyp.
t. 6. fig. 56, ovarian cells.
Crisiadse, Johnst. Brit. Zooph. ed. 2. 282.
Crisiadse (pars), Gray, Syn. Brit. Mus. 1842, 135.

1. Crisia.

Crisia, Fleming, 1828; Blainv. 1830. Crisia, sp. Lamx. 1812; Johnst. Brit. Zooph. 283. Cellaria, sp. Solander. Cellularia, sp. Pallas. Falcaria, sp. Oken, Lehrb. Nat. 91, 1815. Tibiana, sp. Lister, Phil. Trans. 1834.

1. CRISIA eburnes.

Tufted ivory Coralline, Ellis, Corall. 39. no. 6. pl. 21. fig. a, A. Sertularia eburnea, Linn. Syst. ed. 10. 810; Linn. Syst. 1316; Esper, Pflanz. Sert. t. 18. figs. 1-3; Berk. Syn. i. 220; Turt. Gmel. iv. 686; Jameson, Wern. Mem. i. 565; Turt. Brit. Faun. 217; Stew. Elem. ii. 449; ? Sanig. Egypt. Polyp. t. 6. fig. 6. Cellularia eburnea, Pall. Elench. 75; Hogg's Stock. 35.

La Sertolara d'avorio?, Cavol. Pol. Mar. 240. t. 9. figs. 5, 6. Celluria eburnea, Ellis and Soland. Zooph. 24; Bosc, Vers, iii. 133; Lank. Anim. s. Vert. ii. 138, ed. 2. ii. 184; Johnst. Trans. Newc. Soc. ii. 262. pl. 11. fig. 5. Falcaria eburnea, Oken, Lehrb. Nat. 91.

Crisia eburnea, Lamx. Bull. Soc. Phil. iii. 183, 1812; Cor. Flex. 138; Corall. 60; Expos. Méthod. 6; Flem. Brit. Anim. 540; Templeton, Mag. Nat. Hist. ix. 468; Blainv. Dict. Sci. Nat. lx. 424; Actinol. 460. pl. 78. fig. 3; Risso, L'Europ. Mérid. v. 313; Couch, Zooph. Cornw. 41; Corn. Faun. iii. 99. pl. 18. fig. 2; Johnst. Hist. Brit. Zooph. ed. 2. p. 283. fig. 62. t. 50. figs. 3, 4.

a, b, c, f. Dry, on Fuci. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

d. Between talc. Bootle, Cheshire, J. Price, Esq., 1837. Presented by G. Johnston, M.D.

e. On Sertularia filicula, with Tubulipora hispida and T. serpens. Berwick Bay. Presented by G. Johnston, M.D.

g. With Cellaria cristata and C. loricata. Cork, J. V. Thompson, Esq. Presented by G. Johnston, M.D.

h, i. ——? Presented by G. Johnston, M.D. j. In spirits. Presented by G. Johnston, M.D.

2. Crisia geniculata.

Tibiana, Lister, Phil. Trans. 1834, p. 385. pl. 12. fig. 5.

Crisia geniculata, M.-Edwards, Ann. des Sci. Nat. n. s. ix. 197.
pl. 6. fig. 1; Mém. 5; Johnst. Hist. Brit. Zooph. ed. 2. p. 287.

a. On Fuci, with Sertularia polyzonias. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

- b. "A specimen which proves that Cr. geniculata and Cr. eburnea are one species?" Presented by G. Johnston, M.D.
- Ayrshire, Rev. D. Landsborough. Presented by G. Johnston, M.D.

3. Crisia aculeata.

Crisia aculeata, Hassall, Ann. & Mag. Nat. Hist. vi. 170. pl. 7figs. 3, 4, & vi. 366; Johnst. Hist. Brit. Zooph. ed. 2. p. 285. Crisic ivoire, M.-Edwards, Ann. des Sci. Nat. n. s. ix. 198. pl. 6.

fig. 2; not Lamx. Crisia eburnea, Van Beneden, Recherch, 52, pl. 6, figs. 12-16

(without the spinous processes).

a.? b.? On Sertularia. Presented by G. Johnston, M.D.

4. CRISTA denticulata.

Cellaria denticulata, Lamk. Anim. s. Vert. ii. 137, ed. 2. ii. 182. Crisia denticulata, Johnst. Hist. Brit. Zooph. ed. 2. p. 284. t. 50. figs. 5, 6.

Crisie dentelée, M.-Edwards, Ann. des Sci. Nat. n. s. ix. 201.

pl. 7. fig. 1.

Crisia luxata, Flem. Brit. Anim. 540; Blainv. Dict. S. N. Ix. 424; Actinol. 460; Johnst. Brit. Zooph. 262; Thompson, Ann. Nat. Hist. v. 252; Couch, Zooph. Cornw. 42; Corn. Faun. iii. 99. pl. 18. fig. 3; Macgillin. Ann. & Mag. Nat. Hist. ix. 466. Crisia patagonica?, D'Orbigny, Voy. Amér. Mérid.

a. Dry, on Sertularia. Berwick Bay. Presented by G.

Johnston, M.D.

b. Dry, on Fuci. Carnlough, co. Antrim. Presented by G. Johnston, M.D.

c. On black paper. Presented by G. Johnston, M.D.

d. Jersey. Presented by G. Johnston, M.D.

2. FALCARIA.

Falcaria, Oken, Lehrb. Nat. 91, 1815; F. cornuta, type.
Crisidia, M.-Edwards, Mém.; Johnst. Brit. Zooph. ed. 2, 287, 1847.

Eucratea, Lamz. Bull. Soc. Phil. iii. 1812; E. cornuta, type. Unicellaria, sp. Blainv. Dict. Sci. Nat. lx. 1830.

1. FALCARIA cornuta.

Crisidia cornuta, Johnst. Hist. B. Z. ed. 2. p. 287. t. 50. figs. 1, 2. Goat's-horn Coralline, Ellis, Corall. 42. no. 10. pl. 21. fig. c, C;

Couch, Zooph. Cornw. 39. Sertularia cornuta, Linn. Syst. 1316 (ed. 10. 810); Berk. Syn. i. 220; Esper, Pflanz. Sert. t. 19. fig. 1-3.

Cellularia cornuta, Hogg's Stock. 35.

Cellaria cornuta, Ellis and Soland. Zooph. 25; Lamk. Anim. s. Vert. ii. 139, ed. 2. ii. 187.

Falcaria cornuta, Oken, Lehrb. Nat. 91.

Encratea cornuta, Lamz. Bull. Soc. Phil. 1812, iii. 184; Cor. Flex. 149; Risso, L'Europ. Mérid. v. 319; Flem. Brit. Anim. 541; Templeton, Mag. Nat. Hist. ix. 469.

Unicellaria cornuta, Blainv. Act. 462.

Crisidie cornée, M.-Edwards, Ann. des Sci. Nat. n. s. ix. 240.

pl. 8. fig. 2.

Crinia cornuta, Johnst. Brit. Zooph. 260; Hassall, Ann. & Mag. Nat. Hist. vi. 170; Couch, Corn. Faun. iii. 97. pl. 17. fig. 4; Zoologist, ii. 1095.

Cellularia falcata, Pall. Elench. 76.

a. Dry, on paper. Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

b. Dry, on paper, with Crisia eburnea. Berwick Bay. Presented by G. Johnston, M.D.

c. Dry, on Fuci. Cornwall. Presented by G. Johnston, M.D.

d. ——? Presented by G. Johnston, M.D.

2. Falcaria setacea.

Crisia setacea, Couch, Zoologist, ii. 1096; Corn. Faun. iii. 98. pl. 17, fig. sin. under the Crisia cornuta. Crisidia setacea, Johnst. Hist. Brit. Zooph. ed. 2. p. 288. Inhab.

Fam. 10. TUBULIPORIDÆ.

Tubiporadæ, Flem. Brit. Anim. 528.

Tubuliporidæ, Johnst. Brit. Zooph. 247; J. E. Gray, Syn. Brit.
Mus. 135, 1842; Johnst. Hist. Brit. Zooph. ed. 2. p. 265.
Les Tubulipores, Milne-Edwards, Ann. des Sci. Nat. viii. 321.

1. Tubulipora.

Tubulipora, sp. Lamk. Hist. 1816.

Discopora, Flem. Brit. Anim. 530, 1828, not Lamk. nor Lamx.

- * Orbicular, edge cellular, tubes in quincunces? PATINELLA.
- 1. TUBULIPORA verrucaria.

Caryophyllus sive Fungites minimus, &c., Planc. de Conch. min. not. 26. t. 2. no. 9.

Madrepora verrucaria, Linn. Syst. ed. 10.793; Linn. Syst. 1272; Pall. Zooph. var. β. 281; Turt. Gmel. iv. 616; Oliv. Zool. Adriat. 218; Esper, Madrep. t. 17. fig. a, Λ (not good); Turt. Brit. Faun. 204; Stew. Elem. ii. 426; Hogg's Stock. 38.

Millepora verrucaria, Ellis and Soland. Zooph. 137.

Discopora verrucaria, Flem. Brit. Anim. 530.

Tubulipora patina, Lamk. Anim. s. Vert. ii. 163, ed. 2. ii. 244; Risso, L'Europ. Mérid. v. 338; Blainv. Act. 425; Johnst. Trans. Newc. Soc. ii. 269. pl. 9. fig. 8; M.-Edwards, Ann. des Sci. Nat. viii. 329. pl. 13. fig. 1; Thompson, Ann. Nat. Hist. v. 252; Hassall, ibid. vi. 170; Couch, Zooph. Cornw. 44; Corn. Faun. 103; Johnst. Hist. Brit. Zooph. ed. 2. p. 266. t. 47. figs. 1, 2, 3.

Var. B. Tubulipora bellis, Thompson, MS.

a. On bark, "Discopora verrucaria." Presented by G. Johnston, M.D.

b, c, d, e. "Tubipora patina." Presented by G. Johnston,

M.D.

f. "Tubulipora bellis"! W. Thompson, Esq. Presented by G. Johnston, M.D., with

g. A monstrous variety. Presented by G. Johnston, M.D.

** Orbicular, edge thin, tubes in radiating ridges. DISPORBLLA.

2. TUBULIPORA hispida.

Madrepora verrucaria, Fabr. Faun. Granl. 430; Esper, Madrep. t. 17. figs. d, D. e, F. & F, G.
"Coral resembling the cups and foliage of flowers," Cordiner's

Ruins, No. xxii. on the authority of Fleming.

Discopora hispida, Flem. Brit. Anim. 530; Blainv. Act. 446;
Johnst. Brit. Zooph. 270. pl. 31. figs. 9, 11; Thompson, Ann. Nat. Hist. v. 253; Hassall, ibid. vi. 171; Couch, Zooph. Cornw. 47; Corn. Faun. iii. 109. pl. 19. fig. 1.

Tubulipora hispida, Johnst. Hist. Brit. Zooph. ed. 2. p. 268. t. 47. figs. 9, 10, 11; Savigny, Egypt. Polyp. t. 6. fig. 3?

a, b. On Sertularia abietina, with Tubulipora serpens. Presented by G. Johnston, M.D.

 On Sertularia filicula, with Crisia eburnen and Tubulipora serpens. Berwick Bay. Presented by G. Johnston, M.D.

d. On Plumularia falcata, with Tubulipora serpens and Crisia churnea. Berwick Bay. Presented by G. Johnston, M.D. e, f, g. "Discopora hispida." Presented by G. Johnston, M.D.

e, J, g. "Discopora hispida." Presented by G. Johnston, M.D.
 k. "Tubipora hispida, var. β, with Tubulipora verrucaria, M.-Edw." Presented by G. Johnston, M.D.

1, m. n, o, p. "Tubulipora orbiculus." Presented by G. Johnston, M.D.

- q. With Lepralia simplex and L. catenata. Presented by G. Johnston, M.D.
- r. With "Hippothoa catenularia." Presented by G. Johnston, M.D.

s. On Fuci. Presented by G. Johnston, M.D.

"A state of Tubulipora orbiculus." Presented by G. Johnston, M.D.

Var. β. smaller, base circular, the centre orbicular.

- Tubulipora orbiculus, Lamk. Anim. s. Vert. ii. 163, ed. 2. ii. 243.
 k, i, j. "Discopora hispida, Flem." Presented by G. Johnston, M.D.
- *** Base elongated or incrassated, tubes scattered. Pencil-LETTA.
- 3. TUBULIPORA penicillata.

Tubulipora penicillata, Johnst. Hist. Brit. Zooph. ed. 2. p. 271. t. 48, figs. 1, 2.

Tubipora penicillata, Fabr. Faun. Grænl. 429; Turt. Gmel. iv. 615.

Tubulipora Fungia, Couch, Zooph. Cornw. 46; Corn. Faun. iii. 107. pl. 19. fig. 3.

a, b, c. Cornwall, R. Q. Couch, Esq. Presented by G. Johnston, M.D.

- 4. TUBULIPORA hyalina.
- Tubulipora hyalina, Couch, Zooph. Cornw. 47; Corn. Faun. iii. 108; Johnst. Hist. Brit. Zooph. ed. 2. p. 276.

Inhab. Polperro. On Fucus palmatus, Couch.

2. Phalangella.

Phalangella, Gray, Appendix, Proc. Zool. Soc. 1848. Tubulipora, sp. Johnston.

- 1. PHALANGELLA Phalangea.
- Tubulipora Phalangea, Couch, Corn. Faun. iii. 106. pl. 19. fig. 7;
 Johnst. Hist. Brit. Zooph. ed. 2. p. 273. pl. 46. figs. 1, 2.

Tubulipora verrucaria?, M.-Edw. Ann. des Sc. Nat. n. s. viii. 323. pl. 12. fig. 1; Hassall (?), Ann. & Mag. Nat. Hist. vi. 171. pl. 6. figs. 3, 4; and (!) vii. 366.

a, b, c. Cornwall, R. Q. Couch, Esq. Presented by G. Johnston, M.D.

2. PHALANGELLA flabellaris.

Tubipora flabellaris, Fabr. Faun. Grænl. 430; Turt. Gmel. iv. 615. Discopora palmata?, Risso, L'Europ. Mérid. v. 339.

Tubulipora flabellaris, Johnst. Hist. Brit. Zooph. ed. 2. p. 274. t. 46. figs. 5, 6. a, b, c, d. On Fuci. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.
 e, f, g. On Fuci. Presented by G. Johnston, M.D.

3. CORONOPORA.

Coronopora, Gray, Appendix; Proc. Zool. Soc. 1848. Ceriopora, sp. Goldfuss? Millepora, sp. Jameson. Tubulipora, sp. Johnston.

1. Coronopora truncata.

Millepora truncata, Jameson, Wern. Mem. i. 560.
Tubulipora truncata, Flem. Brit. Anim. 529; Johnst. Hist. Brit. Zooph. ed. 2. p. 271. t. 33. figs. 8-10.

a. Orkney. Dry. Presented by W. E. Leach, M.D., 1816.
b. Orkney, fifty fathoms water. In Goadby's fluid. Presented by R. MacAndrew, Esq., 1848.

4. OBELIA.

Obelia, Lamx. Exp. Méth. 81. t. 80, 1821; not Peron. Pustulipora, Johnst. Brit. Zooph. ed. 2, 279, 1847. Idmonea, sp. M.-Edw. Tubipora, sp. Linn. S. N. i. 789, 1757. Tubulipora, sp. Lamk. Hist. ii. 162, 1816.

1. OBELIA serpens.

Small purple Eschara, Ellis, Corall. 74. no. 6. pl. 27 e, E; copied in Ann. des Sc. Nat. n. s. viii. pl. 12. fig. 2.

Tubipora serpens, Linn. Syst. ed. 10. 790; Linn. Syst. 1271; Turt. Gmel. iv. 614; Jameson, Wern. Mem. i. 561; Stew. Elem. ii. 426; Bosc, Vers, ii. 351.

Millepora liliacea, Pall. Elench. 248; Turt. Gmel. iv. 639; Turt. Brit. Faun. 205; Bosc, Vers, ii. 345.

Millepora tubulosa, Ellis and Soland. Zooph. 136; Turt. Gmel. iv. 639; Turt. Brit. Faun. 205; Stew. Elem. ii. 428; Bosc, Vers, ii. 345; Hogg's Stock. 37.

Cellepora ramulosa, Esper, Pflanz. Cellep. t. 5.

Tubulipora fimbria, Lamk. Hist. Anim. s. Vert. ii. 163?

Tubulipora transversa, Lamk. Anim. s. Vert. ii. 162, ed. 2. ii. 242; Risso, L'Europ. Mérid. v. 338; Lamx. Expos. Méth. i. pl. 64. fig. 1 (copied from Ellis); Stark, Elem. ii. 437; Johnst. Trans. Newc. Soc. ii. 269; Blainv. Act. 424.

Obelia tubulifera, Lamx. Expos. Méthod. 81. t. 80. figs. 7, 8; copied in Blainv. Actinol. 424. pl. 71. fig. 1, and in Ann. des Sc. Nat. n. s. viii. pl. 12. fig. 3; Lamk. Anim. s. Vert. ed. 2.

ii. 246.

Tubulipora foraminulata, Blainv. Actinol. 425. pl. 62. figs. 3, 3a (not of Lamarck).

Tubulipora organisans, D'Orbigny.

Tubulipora serpens, Flem. Brit. Anim. 529; Couch, Zooph. Cornw. 45; Corn. Faun. iii. 105. pl. 19. fig. 6; Johnst. Hist. Brit. Zooph. ed. 2. p. 275. t. 47. figs. 4, 5, 6.

Idmonea transversa, M.-Edw. Ann. des Sc. Nat. n. s. ix. 218.

pl. 9. fig. 3.

Pherusa tubulosa, Templeton, Mag. Nat. Hist. ix. 469—on the authority of W. Thompson in Ann. Nat. Hist. v. 252.

a. On Plumularia falcata. Berwick Bay. Presented by G. Johnston, M.D.

b. On Sertularia abietina, and with Tubulipora hispida. Presented by G. Johnston, M.D.

- c. On Sertularia Felicula, with Crisia eburnea and Tubulipora hispida. Berwick Bay. Presented by G. Johnston, M.D.
- d. On Modiola, with Lepralia hyalina. Presented by G. Johnston, M.D.
- e. On a Lima, with Lepralia annulata! Presented by G. Johnston, M.D.
- f, g, h, i. On Fuci. Presented by G. Johnston, M.D. j, k, l, m. On shell. Presented by G. Johnston, M.D.

2. OBELIA deflexa.

Tubulipora deflexa, Couch, Zooph. Cornw. 46; Corn. Faun. iii. 107. pl. 19. fig. 4.

Pustulipora deflexa, Johnst. Hist. Brit. Zooph. ed. 2. p. 279. t. 48.

Tubulipora serpens var.?, Johnston, l. c. 279.

a, b, c. Cornwall, R. Q. Couch, Esq. Presented by G. Johnston, M.D.

3. OBELIA lobulata.

Tubulipora lobulata, Hassall, Ann. & Mag. Nat. Hist. vii. 367. pl. 10. figs. 1, 2; Johnst. Hist. Brit. Zooph. ed. 2. p. 272. T. serpens var., Thompson, MSS.

5. IDMONEA.

Idmonea, Lamx. Expos. Méth. 80. t. 79?; E. Forbes; Johnst. Brit. Zooph. ed. 2. 277, not Flem.

IDMONEA atlantica.

Idmonea atlantica, E. Forbes, MSS.; Johnst. Brit. Zooph. ed. 2. p. 278. t. 48. fig. 3, 3. a, b. Zetland, "E. Forbes." Presented by G. Johnston, M.D.

6. ALECTO.

Alecto, Lamx. Exp. Méth. 84, 1821; Blainv. 1830; Johnst. Brit. Zooph.; not Leach, 1815.

1. Alecto granulata.

Alecto granulata, M.-Edw. Mém. p. 13. pl. 16. fig. 3, 3; Johast. Hist. Brit. Zooph. ed. 2. p. 280. t. 49. figs. 1, 2.

Tubulipora trahens, Couch, Zooph. Cornw. 45; Corn. Faun. iii. 105. pl. 19. fig. 5 (not good).

a, b, c, d, e, f, g, h. On shell. Sana. Presented by G. Johnston, M.D.

 k. With Lepralia catenata. Sana. Presented by G. Johnston, M.D.

2. Alecto major.

Tubulipora repens?, S. V. Wood, Ann. & Mag. Nat. Hist. xiii. 14. Alecto major, Johnst. Hist. Brit. Zooph. ed. 2. p. 281. t. 49. figs. 3, 4.

Alecto dichotoma, Landsborough, MSS.

a, b, c. d. Sana Island. On shells and stones. Presented by G. Johnston, M.D.

3. ALECTO dilatans.

Tubulipora palmata?, S. V. Wood, Ann. & Mag. Nat. Hist. xiii. 14.

Alecto dilatans, Johnst. Hist. Brit. Zooph. ed. 2. p. 282. t. 49. figs. 5-8.

a, b, c, d. Sana Island. On shells. Presented by G. Johnston, M.D.

4. Alecto gracilis.

Alecto gracilis, M.-Edw. Mém. 15. t. 16. fig. 2; Johnst. Brit. Zooph. ed. 2. 282.

Inhab. Isle of Man.

7. BERENICEA.

Berenicea, Lamx. Exp. Méth. 80. t. 80. figs. 1, 2, 1821, not Peron. Tubulipora, sp. Johnst. Brit. Zooph. ed. 1, 1838.

Diastopora, Johnst. Brit. Zooph. ed. 2. 276, 1847, not Lams. Exp. Méth. 73, 1821 (fossil Flustra).

Diastopores simples, M.-Edw. Ann. Sci. Nat. v. 252.

Berenicea, sp. Flem. Brit. Anim. 1828. Obelia, Gray, Misc.; not Lamx. 1821.

1. BERENICEA hyalina.

Berenicea prominens, Lamx. Exp. Méth. 80. t. 80. figs. 1, 2? Berenicea hyalina, Flem. Brit. Anim. 533 (1828).

belia tubifera, Gray, Zool. Misc. 35.

ubulipora Obelia, Johnst. Brit. Zooph. 269. pl. 30. figs. 7, 8; Couch, Zooph. Cornw. 47; Corn. Faun. iii. 108; Thompson, Ann. Nat. Hist. v. 252.

hastopora Obelia, Johnst. Hist. Brit. Zooph. ed. 2. p. 277. t. 47. figs. 7, 8.

a, b, c. On shells, with Tubulipora orbiculus. Presented by

G. Johnston, M.D.

d, e, f. On Modiola. Presented by G. Johnston, M.D. g, k. On Pinna. Cork. Presented by G. Johnston, M.D.

i. With Cellepora pumicosa. Presented by G. Johnston, M.D.

k. "Tubulipora." Scilly Island, J. Mac Andrew, Esq. Presented by G. Johnston, M.D.

8. Pustulipora.

Pustulipora, Blainv. Dict. Sc. Nat. lx.?; Man. Act. 418?; E. Forbes; M.-Edw. Ann. Sci. Nat.; Johnst. Brit. Zooph. ed. 2. 1847, 279.

1. Pustulipora proboscidea.

Pustalipora proboscidea, M.-Edw. Mém. 27. pl. 12. fig. 2; Johnst. Hist. Brit. Zooph. ed. 2. p. 279. t. 48. fig. 4, 4.

a. Zetland Sea. E. Forbes. Presented by G. Johnston, M.D.

APPENDIX.

I. THE CHARACTER OF THE FAMILIES AND GENERA
PROPOSED IN THIS CATALOGUE.

Fam. CAMPANULARIADÆ, p. 83.

CONCHELLA, p. 88.

Coral closely interwoven, resembling a loose-textured sponge; fibres not rugged; cells bell-shaped. "Tentacles 8, rarely 10. Larva is a planula." Dalyell.

- 4. COPPINIA, Hassall, MSS. p. 88.
 - "Polypidom parasitic, hirsute; cells elongate, tubular, mostly curved, arising out of the angle of junction of ascending or basal cells, and the apertures of which are frequently covered with a lid or operculum, which is itself perforated by a small tubular orifice."—Hassall, MSS.
- 1. COPPINIA mirabilis.

Coppinia mirabilis, Hassall, MSS.

a. Coast of Dublin, 1842. Presented by A. H. Hassall, Esq.

Class V. POLYZOA, p. 91.

Order I. CARNOSA.

The polypes covered with a fleshy envelope uniting together into a fleshy polypidom.

Fam. 1. ALCYONIDIADÆ, p. 91.

Polypidom spongy, fleshy, polymorphous; polype cell irregularly disposed with a contractile aperture: no external ovarian capsules.

Order II. CORNEA.

- The polypes covered with a horny flexible external case, forming a massive or arborescent polypidom.
 - A. The body of the polype adnate to the cell.
 - Fam. 2. PEDICELLINIDÆ, p. 93.
- Polypidom creeping, sending forth club-shaped cells; tentacles numerous, contractile (not retractile) into the cells.
- B. The body of the polype separate from the parietes of the cell.
 - Fam. 3. Vesiculariada, p. 94.
- Polypidom confervoid, horny, fistulous, continued, not jointed; polype cell tubular, cylindrical, deciduous.
 - Fam. 4. CRISTATELLIDÆ, p. 99.
- Polypidom tubular, not jointed, often united together into a mass; polype cells cylindrical, tubular, permanent.
 - Fam. 5. PALUDICELLAIDÆ, p. 102.
- The polypidom confervoid, jointed; polype cells ovate, with a roundish rather tubular lateral subapical aperture, all opening on one side of the polypidom.
- c. The polypes covered with a coriaceous external case, which is thicker on the sides and underpart and thinner above; opening of the cell subapical, linear, transverse.
 - Fam. 6. FLUSTRADÆ, p. 103.
- Polype cells placed side by side, forming an expanded crust on rocks, or continued frond, bearing cells on one or both of its sides; ovicells numerous, subglobose.
 - a. Interspaces between the cells coriaceous.
- l. FLUSTRA, p. 103.

I

- Coral frondose, expanded, forked, with cells on both sides, or crustaceous, applied to marine bodies; cells ovate, six-sided, broad above, narrower below, semi-alternate with scattered marginal denticles; ovarial cells globular.
- 2. CHARTELLA, p. 104.
 - Coral frondose, expanded, lobed, with cells on both sides; cells linear-oblong, in many series, with smooth edges.

3. CARBASEA, p. 105.

Coral frondose, expanded, lobed, with the cells only on one side; cells oblong, six-sided, in many series, narrow and truncated below, with smooth edges.

4. AVICULARIA, p. 105.

Coral linear, branched, forked, with the cells only on one side; cells oblong, with a spine on each side of the aperture; ovarial cells globular, large.

5. Flabellaria, p. 106.

Coral linear, branched, forked, with the cells only on one side, with scattered root-like fibres; cells ovate, hexangular, truncated above, many-rowed; edge spinose; ovarial cells hemispherical.

6. Annulipora, p. 107.

Coral incrusting, membranaceous; cells shallow, ovate, circular, spinose on the edge, close together; ovarial cells ——?

7. Flustrella, p. 108.

Coral incrusting, defined, rather fleshy, spinulose; cells shallow, ovate, spinose on the edge, rather far apart.

- b. Interspaces between the cells calcareous.
- 8. Conopeum, p. 108.

Coral incrusting, forming a regular roundish spot, formed of a single layer of regular cells placed close side by side, calcareous, rather vesicular; cells rhombic, in a quincunx; ovarial cells very small, globular.

9. Callopora, p. 109.

Coral incrusting, forming a regular roundish spot formed of a single layer of regular cells placed side by side, those of the circumference being imperfect; cells ovate, elongate, edged with crowded spines; membranaceous above; ovarial cells globular.

10. Amphiblestrum, p. 110.

Coral incrusting, spreading, formed of a single layer of regular cells placed side by side; cells elongate-oblong, four-sided, sides thick, calcareous, each defined with a slight groove above, upper surface membranaceous.

Fam. 7. Bugulidæ, p. 110.

Polype cells single or in pairs or threes, each group forming a joint of a jointed confervoid polypidom, having the aperture of the cells all on one side.

1. CRISULARIA, p. 111.

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Epistomia, p. 83, should be arranged in this family. See Busk, Rep. Misc. Soc. 1848, 14.

The following exotic genera appear to belong to this family:— Selbia, Gray, Dieffenbach, New Zealand, ii. 292, 1843. S. Zelandica.

HALOPHILA, Gray, l. c. ii. 292, 1843. H. Johnstoniæ.

CABEREA, Lamx. Corall. 128, 1816; Blainv. 1830. Cellularia, sp. Lamk. Hist. 1816. Cab. dichotoma.

D. The polypes covered with a hard coriaceous external case of equal thickness throughout; opening of the cell subapical, linear, transverse.

Fam. 8. MICROPORIDÆ, p. 115.

Polype cells forming a crust, placed in a single layer in a quincunx manner.

l. Micropora, p. 115.

Coral crustaceous; cells in a quincunx; aperture linear and lunate.

Order III. CALCAREA.

(Polypes forming a calcareous coral.)

Suborder I. CELLEPORINA, p. 115.

Coral calcareous, the polypes covered with a calcareous external case of equal thickness throughout; opening of the cell subapical, roundish.

Fam. 9. CELLEPORIDÆ, p. 115.

Polype cells placed side by side, forming an applied crust, or frondose, or branched, not jointed, polypidom generally furnished with globular capsules.

- a. Cells attached, forming an anastomosing network without any crust; ovarian cell globular (Savig. Pol. Egypt. t. f. 3). HIP-POTHOINA, p. 115.
- 1. Нірротном, р. 115.
- b. Cells side by side in a single layer, forming a crust. LEPRALIANA, p. 116.

CRIBRILINA, p. 116.

Cells spongy, porous or cribellated, placed side by side in a single series, only slightly thickened by age, uniform, decumbent; mouth superior, semilunar; ovarian tube none.

LEPRALIA, p. 117.

Cells calcareous, hard, placed side by side in a single series, only slightly thickened by age, decumbent; mouth superior, semilunar; ovarian tubes none; ovicell globular, anterior, simple in front.

* Mouth of cell unarmed.

† Crust pierced between the cells. Spec. 1. L. Jacotini.

† Crust continued. Sp. 2. L. simplex.

** Mouth of cell ciliated. Sp. 19 to 21. L. ciliata, &c.

*** Mouth of cell with a spine on each side, Microstoma. 22.

L. annulata.

HERENTIA, p. 122.

Cells calcareous, hard, placed side by side, forming a uniform crust, only slightly thickened by age, decumbent; mouth superior, semicircular, with a cylindrical ovarian tube on one side below the mouth; ovicell globular, anterior.

7. ESCHARINA, p. 123.

Cells calcareous, hard, placed side by side in a single series, decumbent, uniform, only slightly thickened by age; mouth subterminal, superior, with a triangular ovarian tube on each side; ovicell globular, anterior.

8. Escharella, p. 125.

Cells hard, calcareous, placed side by side in a single series, not altered by age, forming an undefined crust; the younger cells on the circumference decumbent, with a superior aperture; the older cells in the middle of the crust sunk, confused, vesicular. A crustaceous *Eschara*.

9. Discopora, p. 126.

Cells calcareous, placed side by side, forming a crust only slightly thickened by age; cells ovate, ascending, with a large round terminal mouth with a large tooth in front; ovarian tubes none; ovicell none?

11. Porella, p. 127.

Coral erect, branched, vesicular, roundish, tips of branches compressed, with regular cells placed in a quincunx; cells of the older part of the coral rounded.

12. Celleporina, p. 128.

Coral crustaceous, attached; cells hard, calcareous, crowded, forming a circumscribed crust; the younger cells in the circumference decumbent, radiating, free at the end, the older cells in the centre crowded, ascending or suberect, united to-

gether nearly to the mouth; younger cells with a roundish subterminal mouth with a tubular ovarian tube on each side; ovicells globular, small, anterior.

13. CELLEPORELLA, p. 128.

Coral crustaceous, attached; cells hard, calcareous, crowded, forming a circumscribed crust; the younger cells on the circumference decumbent, radiating, free at the end, the outer cells in the centre crowded, ascending, or subcrect, united together nearly to the mouth; younger cells with a simple round terminal mouth without any ovarial tubes (or ovicells?).

Fam. 10. SCUPARIADÆ, p. 132.

Polype cell single or in pairs, each forming a joint of an articulated conferva-like polypidom with the mouth of all the cells on one of its sides.

4. SALPINGIA, Coppin, MSS.

"Cells elongated, sessile, on a branched stem; apertures lateral, broader above than below; produced base of cells surrounded by one or more spines and trumpet-shaped processes." Coppin, MSS.

l. Salpingia Hassallii.

Salpingia Hassallii, Coppin, MSS.

Brighton, 20th June, 1848. On filamentous Algæ. Presented by John Coppin, Esq.

Suborder II. TUBULIPORINA, p. 134.

The polypes covered with a transparent glassy external cylindrical tubular case of equal thickness, with the opening at the end of the tube; ovicells? vesicular.

Fam. 11. CRISIADÆ, p. 135.

Polype cell single or in pairs, forming a joint of an articulated conferva-like polypidom with the mouths of all the cells on one side.

Fam. 12. Tubuliporidæ, p. 137.

Polype cells on an expanded crust-like or branched, not jointed, polypidom.

2. PHALANGELLA, p. 139.

Coral expanded, crustaceous, lobed or fan-shaped, without any visible margin, upper surface covered with tubular cells placed in irregular cross rows.

3. Coronopora, p. 140.

Coral calcareous, spongy, cylindrical, proliferous (as if branched), surface pitted, apex truncated, rather convex, with the tubular cells placed in convex diverging ridges.

II. ADDITIONS AND CORRECTIONS.

- Page 4. "ECHINUS, n. s." MacAndrew.
 - \bar{b} , c. Zetland, in solution of bay-salt. Presented by **R**. MacAndrew, Esq.
 - e, f, g. Zetland. Dry. Presented by R. MacAndrew, Esq.
- 7. Echinocardium ovatum.
 - c, d, e, f. Hebrides, Zetland. Presented by R. MacAndrew, Esq.
- 7. Brissiopsis lyrifer.
 - c, d, e, f. Hebrides. Presented by R. MacAndrew, Esq.
- 8. THYONE Raphanus.
 - a. Zetland. Presented by R. MacAndrew, Esq.
- Thyone, add Anaperus, Troschel, Erich. Arch. Nat. 1846, 60.
 Thyone fusus, add Anaperus fusus, Troschel, Erich. Arch. Nat. 1846, 62.
- 9. Psolus phantopus.
 - "Holothuria squamata," MacAndrew.
 - Zetland. In solution of bay-salt. Presented by R. Mac-Andrew, Esq.
- 14. Sipunculus granulosa, read granulosus.
- 30. Ephyra simplex, Penn., read Peron.
- 41. GYNOSOMATA, read GYMNOSOMATA.
- 51. Turbinolia Millesiana.
 - b, c, d. Cornwall. Presented by R. MacAndrew, Esq.
- 52. CARYOPHYLLIA Smithii, var.
 - e. var. Zetland. Presented by R. MacAndrew, Esq.
- 57. IRIS hippuris and IRIS extrochus, read ISIS.
- 59. PAVONARIA quadrangularis.
 - c, d, e, f. In spirits. Oban. Presented by R. MacAndrew, Esq.
- 62. CORDYLOPHORA lacustris.
 - a. In spirits. From a cistern at Kensington. Presented by George Busk, Esq.
- 70. After Sertularia pumila, odd
 - 2*. SERTULARIA gracilis.
 - Sertularia gracilis, Hassall, MSS. (Ann. Nat. Hist. July 1848, cover).
 - a, b, c. On Algae. Brighton. Presented by A. H. Hassell, Esq.

- Page 75. Nigellastrum nigra, pinnata, and fusca, read N. nigrum, N. pinnatum, and N. fuscum.
- 82. Epistomia Bursaria, add Notamia Bursaria, Busk, Report Microsc. Soc. 1848, 14. Mr. Busk describes the animal and proves this genus to belong to Polyzoa. It ought to be arranged near Bicellaria, p. 112.

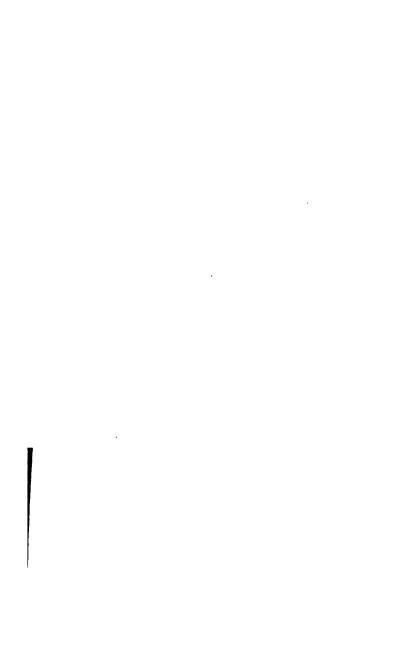
Add d, e, f. On Algæ. Brighton: common. Presented by John Coppin, Esq.

87. Capsularia Syringa.

- b. Ramsgate, May 1842. Presented by John Coppin, Esq.
- 88. 7*. Capsularia serpens, n. s.

Campanularia serpens, Hassall, MSS.

- a. Coast of Dublin, 1842. Presented by A. II. Hassall, Esq.
- Pulmonellum: erase. This genus is a Tunicata. Add Aplidium Ficus, Savigny, Mem. part ii. 183; Forbes and Hanley, British Conch. 11.
 Alpidium Ficus, Flem. Brit. Anim. 470.
- 133. Etea Anguina, add Anguinaria spatulata, Busk, Rep. Microsc. Soc. 1848, 15. Mr. Busk describes the animal.
- 141. IDMONEA atlantica.
 - c. Zetland. Presented by R. MacAndrew, Esq.



CONCORDANCE

OF THE NAMES USED IN THE FOLLOWING WORKS ON BRITISH RADIATA
AND IN THIS CATALOGUE, WITH A REFERENCE TO THE PAGE IN
EACH WORK.

I FORBES'S HISTORY OF BRITISH STAR-FISHES.

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II. FORBES'S BRITISH ACALEPHÆ.

Mr. Edward Forbes has given me the following List of BRITISH ACALEPHE, about to be published by the Ray Society; "all the spurious and incomprehensible species being rejected."—March 28, 1848.

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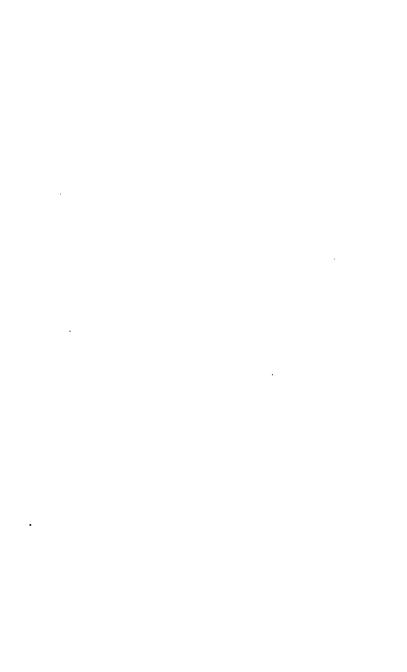
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THE END.



## LIST

OF THE SPECIMENS OF

## BRITISH SPONGES

IN

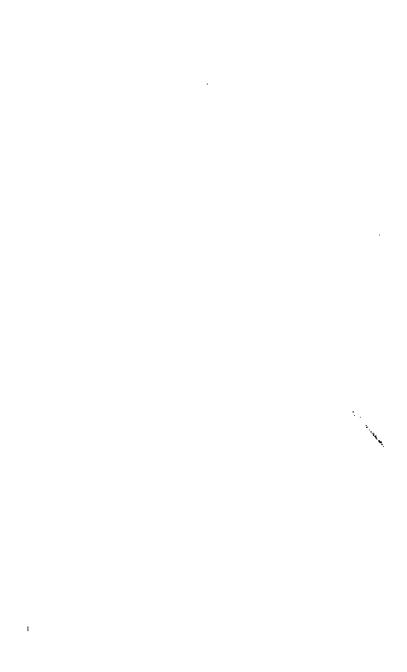
## THE COLLECTION

OF THE

# BRITISH MUSEUM.

LONDON:
PRINTED BY ORDER OF THE TRUSTEES.

1848.





## INTRODUCTION.

THE principal object of the present List has been to give a complete Catalogue of the British specimens of Sponges contained in the Collection of the British Museum, indicating at the same time the peculiarities of each as regards age, habitation, condition, and the source from whence it has been received.

With this view, the different individuals of each species contained in the Collection are indicated by the letters a, b, c, &c., following the name of the species and its synonyma, and followed by the habitat, state, and the source from whence the specimens were derived.

Those specimens which have been presented to the Museum have the name of the donor; and in general the collection from whence the specimen has been purchased or procured in exchange is also marked, as it often gives some authenticity to its history.

In the adoption of the generic and specific names it has been thought right to use, wherever it was possible, that which was first applied to the species. As far as regards the specific name, there is comparatively little difficulty in the application of this simple rule; but generic names have been used by different authors in senses so widely different, and the groups which they were meant to designate have been so variously extended and restricted, that it was no easy matter to determine, where several names have been used, which of them ought to be preferred. Great attention has been paid to consult the original authority, to know the type, and select the name which appeared to be the most ancient; and reference is made to the work in which, and the date when, each genus and its synonyma were respectively published.

Under each species there have been appended all the names under

which the animal or coral has been mentioned since the establishment of the Linnæan system of nomenclature, and reference is given to the work in which these were first used, and especially to the different works treating on British animals in which it is mentioned, and also a reference to the best figures. The chief part of these references have been extracted from the admirable and classical work on the Spontage by Dr. George Johnston, additional references having been made to older exotic works which have escaped his researches, or to others which have appeared since his publication.

The British Museum is fortunate in having received the chief portion of the specimens from the several authors who originally described the species, so that there can be no doubt of the specimens being the real representatives of the names they bear; for besides possessing some of the original specimens collected and described by Colonel George Montague and Dr. W. E. Leach, Dr. George Johnston of Berwick has most kindly presented to the Museum the whole of his Collection, which he used in the preparation of his classical work on this subject.

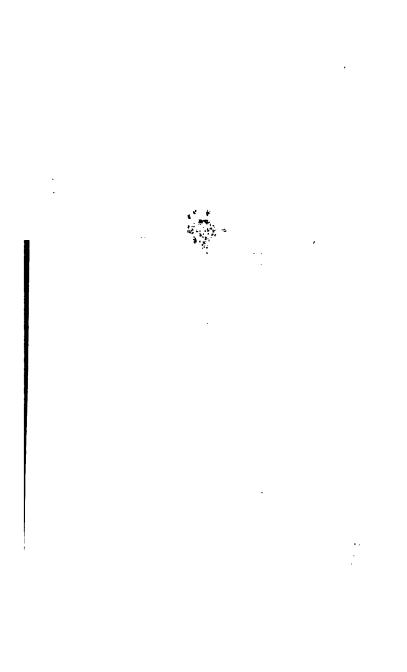
As the attention to the laws of priority, now so universally adhered to, has caused the alteration of a few of the names used in Dr. Johnston's work, a Concordance showing the changes has been added.

JOHN EDWARD GRAY.

June 12th, 1848.

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Les Sponges, Cwv. Tab. Elem. 628, 1798; Règ. Anim. iii. 321, 1817.
Spongites, Latreille, Fam. Nat. 547.
Spongidize and Alcyonidese, Gray, Brit. Plants, 352, 354.
Spongiaise, Flem. B. A. 518, 1828.
Spongiaires, M. Edw. in Lam. Hist. Anim. s. Vert. ed. 2. ii. 534.
Zoophyta porifera, Grant, Crit. Comp. Anat. 5; Cyclop. Anat. and Phys. p. 108; Roget, Bridg. Treat. p. 147.
Ceratophyta spongiosa, Schweiger, Handb. 421, 1820.
Amorphozoa, Blainv. Man. Act. 527; Johnst. B. Sponges, 78.

#### Order I. SILICEA.

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#### 1. TETHYA.

Tethia or Tethya, Lam. Anim. s. Vert. ii. 384; Gray, Br. Pl. i. 361; Flem. Brit. Anim. 519; Schw. Beobacht. vii. and Handb. 422.

Tethea, Johnston, Brit. Sp. and Coral. pp. 81, 244.

Spongia, Lamour. Bull. Soc. Phil. iii. 182, 1812.

Les Thétyes, Cuv. Règ. Anim. iii. 321.

Tethium, Blainv. Man. 544.

Alcionium β. Cuv. Tab. Elem. 682, 1798.

#### 1. TETHYA Cranium.

Aleyonium Cranium, Müll. Zool. Dan. Prod. 255; Zool. Dan. tab. 85, not figured; Turt. Gmel. iv. 654; Lamour. Cor. Flex. 347, Corall. 248.

Tethya Cranium, Lam. Anim. s. Vert. ii. 386, and ii. 592, 2nd edit.; Flem. Brit. Anim. 519; Blainv. Actinol. 544; Stark, Elem. ii. 423; Johnston, Brit. Sponges, p. 83. t. 1. f. 1-8, and 244 (not Risso, E. M. v. 364).

Aleyonium globosum, Müll. Zool. Dan. tab. 157. figs. 1, 2.

Alcyonium Lyncurium, Esper, Alcyon. tab. 19. fig. 1; Jameson in Wern. Mem. i. 563.

 Spongia pilosa, Montagu in Wern. Mem. ii. 119. pl. 13. figs. 1, 2.
 Tethya pilosa, Gray, Brit. Plants, 362; Grant, Edinb. N. Phil. Jour. p. 196.

a. Slice of (Tethya Cranium), from Dr. Fleming. Pre-

sented by G. Johnston, M.D.

b. c. In spirits. Zetland. Presented by G. Johnston, M.D.
 d. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

## 2. TETHYA aurantium.

Tetie sferica, Donati, Nat. mar. dell' Adriat. 64. tav. 9. figs. a, b, c. Aleyonium aurantium, Pall. Elench. 357; Esper, Aleyon. tab. 19. fig. 4-8; copied from Donati.

Aleyonium Lyncurium, Gmelin. Syst. 1295; Turt. Gmel. iv. 653; Lamour. Cor. Flex. 343, Corall. 246; Bosc. Vers, iii. 159.

Tethya Lyncurium, Lam. Anim. s. Vert. ii. 386 (592, 2nd edit.); Risso, L'Europ. Mérid. v. 363; Blainv. Actinol. 544. pl. 91. fig. 3?; Delle Chiaje, Anim. s. Vert. Nap. iii. 116; Johnston, Brit. Sp. p. 85. Woodcut, N. 12. and p. 244.

Spongia verrucosa, Montagu in Wern. Mem. iii. 117. pl. 13.

figs. 4, 5.

Tethya verrucosa, Gray, Brit. Plants, p. 362.

Tethya sphærica, Fleming, B. A. 520; Bellamy, South Devon, 268.
a, b. Brit. Sponges, 87. fig. 12. Presented by G. Johnston, M.D.

c, d, e, f. In spirits. Cunnemara. Presented by G. John-

ston, M.D.

 Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

h. In spirits. Torbay. Presented by Mrs. Griffith.

### 2. GEODIA.

Geodia, Lam. Anim. s. Vert. 2nd edit. ii. 593; ? Audouin et Milne Edwards, Hist. Nat. du Litt. de la France, i. p. 77; Blainv. Man. 534; Schweig. Handb. 422; Johnston, Br. Spon. pp. 195, 244.

Cydonium, Flem. B. A. 516; Blainv. Diet. Sci. Nat. 1x. 489

(Sponge not animal).

Aleyonium, sp. Couch, Corn. Fauna, iii. 133.

## 1. GEODIA Cydonium.

Aleyonium Cydonium, Jameson in Wern. Mem. i. 563!; Stew. Elem. ii. 432; not Müll. Zool. Dan. t. 81.

Cydonium Mulleri, Flem. Brit. Anim. 516!; Grant in Edinb. New Phil. Journ. i. 195; Johnston's Brit. Zooph. 191; not Blainv. Man. 525.

Geodia Zetlandica, Johnston, Brit. Sponges, 195. t. 3. fig. 34. Alcionio primo, Donati, Stor. Nat. t. 8. figs. a, b, c, d?

Alcyonium subviride, Couch, Corn. Fauna, iii. 133.

- a. A slice of Cydonium Mulleri, figured Brit. Sponges, t. 3. figs. 3, 4. From Dr. Fleming. Presented by G. Johnston, M.D.
- ? b. ("G. Zetlandica"), Cornwall, W. C. Peach, Esq. Presented by G. Johnston, M.D.

c. Ireland. Presented by G. Johnston, M.D.

d. Spicula of a, in Canada balsam, prepared by J. S. Bower-bank, Esq.

#### 3. PACHYMATISMA.

Pachymatisma, Bowerbank, Trans. Microscop. Soc. 1847; Johnst. Brit. Sp. 1842.

1. PACHYMATISMA Johnstonia.

Halichondria Johnstonia, Bowerbank's MSS.; Johnst. Brit. Sponges, 198. t. 5. fig. 3.

Pachymatisma Johnstonia, Johnst. Brit. Sponges, 244; Bowerbank, Trans. Microscop. Soc. i. t.

- a. Torquay, Devon, J. S. Bowerbank. Presented by G. Johnston, M.D.
- In spirits, large size, Torquay. Presented by J. S. Bowerbank, Esq.
- c. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 4. HALICHONDRIA.

Halichondria, Flem. Brit. Anim. 520, 1828; Johnst. Br. Sp. pp. 88, 244.

Halina, Grant in Edinb. Encyclop. xviii. 844.

Haliclona, Grant, Outl. Comp. Anat. 5.

Halispongia, Blainv. Actinolog. 532, 1834.

Tupha and Scypha, sp. Gray, 1821.

Manon, sp. Schweig. 1820.

Tragos, sp. Schweig. 1820.

Cliona, Grant; Johnst. B. Zooph. ed. 1.

Alcyonium, sp. Esper; Lamk. 1816 (not 1801).

Anthelia, sp. Blainv. Dict. Sc. Nat. lx.

Alcyonium \$\beta\$, Cuv. Tab. Elem. 682.

Chaogites, sp. Mantell.

## a. TUPHA, sp. Gray.

## 1. HALICHONDRIA palmata.

Spongia palmata, Sibb. Scot. ii. lib. iv. 55; Ellis and Soland. Zooph. 189. pl. 58. fig. 6; Turt. Gmel. iv. 659; Turt. Brit. Faun. 209; Jameson in Wern. Mem. i. 562; Montagu in ibid. ii. 80; Bosc. Vers, iii. 172; Stew. Elem. ii. 434; Lam. Anim. s. Vert. ii. 379, and ii. 569, 2nd edit.; Lamour. Cor. Flex. 75, Corall. 181; Parkins. Oryctology, 46; Stark, Elem. ii. 424 (not Templeton, Mag. N. H.).

Tupha palmata, Gray, Brit. Pl. i. 355.

Halichondria palmata, Flem. Brit. Anim.; Johnst. in Trans. Newc. Soc. ii. 269; Bellamy's South Devon, 268; Johnst. Brit. Spon. p. 93. tab. 2, p. 148. figs. 15 and 24.

Halispongia palmata, Blainv. Actinol. 533. pl. 93. fig. 4.

Spongua bacillaris, Linn. Syst. 1299; Müll. Zool. Dan. Prod. 256; Turt. Gmel. iv. 659; Lamour. Cor. Flex. 83, Corall. 186; Bosc. Vers. iii. 171; Parkins. Oryet. 48.

Spongia oculata, Esper, Spong. tab. 1. figs. 1, 2.

Manon oculatum, Schweig. Handb. 422.

Mermaid's gloves, Shetlanders.

a. On coast of Berwick. Presented by G. Johnston, M.D.
 b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 2. HALICHONDRIA oculata.

Spongia ramosa, Raii Hist. i. 81, and Synon. 29. no. 1. Spongia ramosa apicibus acutis furcis, Petiv. Pterigraph. Amer. tab. 19. fig. 3.

Branched English Sponge, Ellis, Corall. 80. no. 1. pl. 32. fig.f,

F; Phil. Trans. abridg. xii. 261. pl. 7. B.

Spongia oculata, Pall. Elench. 390; Linn. Syst. 1298; Ellis and Soland. Zooph. 184; Berk. Syn. i. 213; Turt. Gmel. iv. 658; Turt. Brit. Faum. 208; Stew. Elem. ii. 434; Montagu in Wern. Mem. ii. 78. pl. 6. fig. 2; Lam. Anim. s. Vert. ii. 378, 2nd edit. ii. 569; Bosc. Vers. iii. 170; Hogg's Stock. 39; Lamour. Cor. Flex. 74, Corall. 121; Parkins. Oryct. 46.

Halichondria oculata, Johnst. Brit. Sponges, 94. t. 3, p. 245.

Tupha oculata, Gray, Brit. Pl. i. 354.

Sp. dichotoma, Gmelin, Syst. 1299; Müll. Zool. Dan. Prod. 256; Ellis and Soland. Zooph. 187; Berk. Syn. i. 213; Turt. Gmel. iv. 659; Montagu in Wern. Mem. ii. 82. pl. 6. fig. 1; Lamour. Cor. Flex. 67, Corall. 177; Parkins. Oryct. 45; Lam. Anim. s. Vert. ii. 375, 2nd edit. ii. 566; Bosc, Vers, iii. 171.

Spongia polychotoma, Esper, Spong. tab. 36, Tupha dichotoma, Gray, Brit. Pl. i. 355. Halichondria ramosa, Flem. Brit. Anim. 523; Bellamy's South Devon, 268.

Haliclona oculata, Grant in Outl. Comp. Anat. 5. fig. 2. Halispongia ramosa, Phiniv. Actinolog. 533.

L'H. paniforme, Blainv. Atlas, pl. 93. fig. 5.

a. Mouth of the Tay, "W. Jackson, jun." Presented by G. Johnston, M.D.

b. A fragment. Presented by G. Johnston, M.D.

c. Frith of Forth. Presented by G. Johnston, M.D.

- d. On a crab, Brit. Sp. t. 3. Presented by G. Johnston, M.D.
- e. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 3. Halichondria cervicornis.

Spongia ramosa, Ger. Herb. em. 1577, no. 9; Merr. Pin. 116. Downy-branched English Sponge, Ellis in Phil. Trans. abridg. xii. 261. pl. 7. fig. C.

Spongia cervicornis, Pall. Elench. 388.

Halichondria cervicornis, Johnst. Brit. Sponges, 96. t. 4, 5. p. 245. Sp. stuposa, Ellis and Soland. Zooph. 186; Turt. Gmel. iv. 659; Turt. Brit. Faun. 208; Jameson in Wern. Mem. i. 562; Montagu in ibid. ii. 79. pl. 3. figs. 1, 2, and pl. 4; Stew. Elem. ii. 434; Bosc. Vers, iii. 172; Lamour. Cor. Flex. 78, Corall. 183; Parkins. Oryct. 47; Lam. Anim. s. Vert. ii. 381, 2nd edit. ii.

572; D. Chiaje, Anim. s. Vert. Nap. iv. 150 (not Esper, t. 40). Tupha stuposa, Gray, Brit. Pl. i. 354.

Spongia lanuginosa, Esper, Spong. tab. 24. figs. 1, 2; Lam. Anim. s. Vert. ii. 379, 2nd edit. ii. 570; Lamour. Cor. Flex. 75, Corall. 181; Parkins. Oryct. 46.

Spongia echidnæa, Lamour. Cor. Flex. 68, Corall. 177.

Var. B. Johnst. Brit. Sp. 96.

Spongia digitata, Montagu in Wern. Mem. ii. 84. pl. 7; Flem. Brit. Anim. 525 (not Templeton, Mag. Nat. Hist.).
Tupha digitata, Gray, Brit. Pl. i. 355.

Sp. fruticosa, Esper, Spongia, t. 10. figs. 1, 2?

- a. Short, much-branched, "S. stuposa var. damicornis."
  Presented by G. Johnston, M.D.
- b. Elongate, figured Johnst. Brit. Sp. t. 5. fig. 1. Presented by G. Johnston, M.D.

c. Elongate, figured Johnst. Brit. Sp. t. 5. fig. 2. Presented by G. Johnston, M.D.

d. Spicula of b, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

## 4. HALICHONDRIA hispida.

Spongia hispida, Montagu in Wern. Mem. ii. 86. pl. 5. figs. 1, 2. Tupha hispida, Gray, Br. Pl. i. 355.

Halichondria hispida, Flem. Br. Anim.; Johnst. Brit. Sp. pp. 98. and 245 (only known from Montagu's description).

a. "Cornish." Presented by G. Johnston, M.D.

 Specimen of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 5. HALICHONDRIA? ramosa.

Spongia ramosa, Montagu in Wern. Mem. ii. 84. pl. 8; Flem. Brit. Anim. 526.

Tupha ramosa, Gray, Brit. Pl. i. 355.

Halichondria? ramosa, Johnst. Brit. Spon. pp. 99, 245.

Inhab. coast of Devon, Montagu.

#### 6. HALICHONDRIA tubulosa.

Spongia tubulosa, Montagu in Wern. Mem. ii. 91; Templeton in Mag. Nat. Hist. ix. 471 (not Solunder and Ellis, t. 58. fig. 7).

Spongia semitubulosa?, Lam. Anim. s. Vert. ii. 380, 2nd edit. ii. 570; Lamour. Cor. Flex. 76, Corall. 182; Parkins. Oryet. 46. Scypha tubulosa, Gray, Brit. Pl. i. 357.

Halichondria Montaguii, Flem. Brit. Anim. 522; Johnst. Brit. Sp. p. 99. t. 6. fig. 1, p. 245.

a. Dublin Bay. Presented by G. Johnston, M.D.

 Spicula of a, in Canada balsam. P.epared by J. S. Bowerbank, Esq.

## 7. HALICHONDRIA Columbæ.

Spongia Columbæ, Walker, Essays, 96.

Halichondria Columbæ, Flem. Brit. Anim, 521; Johnst. Brit. Spong. pp. 101 and 245.

Spongia cancellata, Sow. Brit. Misc. 131, pl. 60; Montagu in Wern. Mem. ii. 110; Turt. Brit. Faun. 208.

Scypha cancellata, Gray, Brit. Pl. i. 358.

Inhab. coast of Scotland, Walker; Brighton, Fellows.

## 8. HALICHONDRIA? plumosa.

Spongia plumosa, Montagu in Wern. Mem. ii. 116; Flem. Br. Anim. 526; Gray, Br. Pl. i. 361.

Halichondria? plumosa, Johnst. Br. Sp. pp. 103, 245.

Inhab. coast of Devon, Montagu.

9. HALICHONDRIA fruticosa.

Spongia fruticosa, Montagu in Wern. Mem. ii. 112. pl. 14. figs. 3, 4; Gray, Brit. Pl. i. 360; Grant in Edin. New Phil. Journ. ii. 139. pl. 2. fig. 10; the spiculum copied in Blainv. Actinol. pl. 94. fig. 10.

Halichondria fruticosa, Flem. Brit. Anim. 522; Johnston, Br.

Spon. p. 104. t. 14. fig. 1, p. 245.

Spongia crispata, Esper, Spong. tab. 37. fig. 1-3?

Spongia licheniformis, Lum. Anim. s. Vert. ii. 354, 2nd edit. ii.

543?; Lamour. Cor. Flex. 22, Corall. 153?

a. " Cornwall, J. Couch, Esq." Presented by G. Johnston, M.D.

b. Washed. Presented by G. Johnston, M.D. c.? Washed. Presented by G. Johnston, M.D.

d. Spicula of b, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### Tragos, sp. Schweig.

10. HALICHONDRIA infundibuliformis.

Spongia infundibuliformis, Petiv. Pterogr. Amer. tab. 19, fig. 6? Spongia infundibuliformis, Linn. Syst. 1296; Mill. Zool. Dan. Prod. 256. no. 3085; Esper, Spong. tab. 57. figs. 1, 2; Jameson in Wern. Mem. i. 562; Turt. Gmel. iv. 657; Stew. Elem. ii. 433; Bosc. Vers, iii. 168; Montagu in Wern. Mem. ii. 103; Gray, Brit. Pl. i. 359.

Spongia? crateriformis, Pall. Elench. 386.

Spongia calyciformis, Lam. Anim. s. Vert. ii. 365, 2nd edit. ii. 555. Spongia Pocillum, Lamour. Cor. Flex. 45, Corall, 166 (not Müll. et Fabric.).

Halichondria infundibuliformis, Flem. Brit. Anim. 524; Johnst.

Brit. Spong. p. 105. pl. 6. fig. 3, p. 246.

a. Br. Sp. t. 6. f. 3. Cumbra, Rev. D. Landsborough.

Presented by G. Johnston, M.D.

b. Spicula of a, Canada balsam. Prepared by J. S. Bowerbank, Esq.

11. HALICHONDRIA ventilabrum.

Sea-fan Sponge, Ellis in Phil. Trans. abridg. xii. 261. p. 7. fig. H. Spongia ventilabrum, Linn. Syst. 1296; Müll. Zool. Dan. Prod. 255; Ellis and Soland. Zooph. 188; Turt. Gmel. iv. 656; Jameson in Wern. Mem. i. 561; Montagu in ibid. ii, 105; Stew. Elem. ii. 433; Bosc. Vers. iii. 167; Stark, Elem. ii. 424; Grant in Edin. New Phil. Journ. i. 349, and ii. 122. pl. 2. fig. 5, copied in Blainv. Atlas, pl. 94. fig. 5.

Halichondria ventilabrum, Johnst. B. Sponges, 107. t. 7, p. 246.

Spongia ventilabriformis, Gray, Brit. Pl. i. 359.

Haliehondria ventilabra, Flem. Brit. Anim. 523; Thompson in Ann. Nat. Hist. v. 254; Bellamy's South Devon, 268.

Halispongia ventilabra, Blaine. Actin. 533.

Spongia Zetlandica, Jameson in Wern. Mem. i. 561.

Spongia xerampelina, Grant in Edin. Phil. Journ. xiv. 116. Ling Hoods, Zetlanders.

a. Brit. Sp. t. 7. Presented by G. Johnston, M.D.

 Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

Var. B. Johnst. Brit. Sp. 107.

Spongia Scypha, Montagu in Wern. Mem. ii. 107. pl. 15. fig. 1. Sp. foliascens, Gray, Brit. Pl. i. 359.

#### c. HALICHONDRIA.

#### 12. HALICHONDRIA simulans.

Halichondria simulans, Johnston, Brit. Sp. p. 109, t. 8, p. 206.
Var. a. Erect, irregularly branched (Brit. Sp. figs. 1, 2).

Var. β. Creeping, ramose or nodulous (fig. 3).

Halispongia reptans, Scouler MS.

Var. γ. Papillary (Brit. Sp. fig. 4). Var. δ. Massive (Brit. Sp. fig. 5).

a. Branched. Dublin, Dr. Scouler. Presented by G. Johnston, M.D.

 Branched, Brit. Sp. t. S. f. 1. Dr. Scouler. Presented by G. Johnston, M.D.

c. Branched, Brit. Sp. t. S. f. 2. Dr. Scouler. Presented by G. Johnston, M.D.

d. Branched. Dr. Scouler. Presented by G. Johnston, M.D. e. Clavate, Brit. Sp. t. S. f. l. Dr. Scouler. Presented by

G. Johnston, M.D.
f. Tuberose, Brit. Sp. t. 8. f. 1. Dr. Scouler. Presented by G. Johnston, M.D.

g. Spicula of a, in Canada balsam. Prepared by J. S. Bower-bank, Esq.

## 13. HALICHONDRIA cinerea.

Spongia cinerea, Grant in Edin. New Phil. Journ. ii. 204, pl. 2.
 fig. 3 (the spiculum), copied in Blainv. Actinol. pl. 94, fig. 3.
 Halichondria cinerea, Flem. Brit. Anim. 521; Johnston, Br. Sp.

p. 111. t. 4. figs. 4, 5 (spicula, 246).

Spongia eærulea Risso, L'Europ, Mérid. v. 373?; Delle Chinje,
 Anim. s. Vert. Nap. iii. 113. tav. 37. fig. 11?
 Spongia pulverulenta, Scouler MS.

a. (Dublin Bay?) Presented by G. Johnston, M.D.

b.? On a rock, Scarborough, W. Bean. Presented by G. Johnston, M.D.

c. & e.? Presented by G. Johnston, M.D.

f. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 14. HALICHONDRIA albescens.

Halichondria albescens, Johnst. Brit. Sponges, 198. t. 20. f. 8, and p. 246.

Inhab. ——?

### 15. HALICHONDRIA panicea.

Halichondria panicea, Johnst. Brit. Sp. 114. t. 10 & 11. fig. 5, p. 246; not Fleming.

Halichondria papillaris, Flem. Brit. Anim. 520; Johnst. in Trans. Newc. Soc. ii. 270. pl. 9. fig. 3.

Halispongia papillaris, Blainv. Actinol. 532.

Var. 1. Johnst. Brit. Sp. 114. t. 10. fig. 1.

Spongia tomentosa, Gmelin, Syst. 1299?; Turt. Gmel. iv. 659; Turt. Brit. Faun. 208; Stew. Elem. ii. 434; Bosc. Vers, iii. 171.

Alcyonium tomentosum, Templeton in Mag. Nat. Hist. ix. 470. a. On Fucus, Brit. Sp. t. 10. f. 1. Ireland, W. Thompson. Presented by G. Johnston, M.D.

Var. 2. Johnst. Brit. Sp. 114, t. 10. fig. 2.

Fucus marinus noster similis medullæ panis, Raii Hist. Plant. iii. 16.

Spongia informis durior, compressa, Raii Syn. i. 30. no. 7.

Alcyonium ramosum molle, medullæ panis intus simile, Raii Syn. 31. no. 1.

Sponge like crumb of bread, Ellis, Corall. 80. no. 2. pl. 16. fig. d. D; Phil. Trans. abridg. xii. 261. pl. 7. A.

Spongia panicea, Pall. Elench. 388; Turt. Gmel. iv. 660; Lamour. Cor. Flex. 29, Corall. 157; Stew. Elem. ii. 435; Bosc. Vers, iii. 173; not Esper, t. 18. f. 12.

Sp. urens, Ellis and Soland. Zooph. 187; Hogg, Stock. 38; Templeton in lib. cit. ix. 471.

Sp. tomentosa, Montagu in Wern. Mem. ii. 99; Jameson in ibid. i. 562; Gray, Brit. Pl. i. 361; Grant in Edin. Phil. Journ. xiv. 114.

Sp. urtica, Risso, L'Europ. Mérid. v. 370.

Alcyonium papillosum, var. 2, Lamarck, Anim. s. Vert. ii. 398, 2nd edit. ii. 604.

Alcyonium medullare, Lam. Anim. s. Vert. ii. 400, 2nd edit. ii. 606; Templeton in Mag. Nat. Hist. ix. 470; Lamour. Cor. Flex. 355, Corall. 251.

Alcyonium paniceum, Lam. Anim. s. Vert. ii. 400, 2nd edit. ii. 607.

Alcyonium tubulosum, Esper, Alcyon. 40. t. 11. figs. 1, 2 (ou stalk of Laminaria).

b, c. Tubular, from stem of Fucus. Presented by G. Johnston, M.D.

d. Expanded, on Fuci. Presented by G. Johnston, M.D.

?e. & f. Presented by G. Johnston, M.D.

 Spicula, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

Var. 3. Johnst. Brit. Sp. 114. t. 10. figs. 3, 4. (Plate XI. fig. 5.) Cock's-comb Sponge, Ellis in Phil. Trans. abridg. xii. 261. pl. 7. fig. F.

Alcyonium manus diaboli, Linn. Syst. 1296; Esper, Alcyon. 66.

t. 21. figs. 1, 2, and t. 22.

Spongia cristata, Ellis and Soland. Zooph. 186; Turt. Gmel. iv. 659; Turt. Brit. Faun. 208; Bosc. Vers, iii. 172; Stew. Elem. ii. 434; Montagu in Wern. Mem. ii. 103; Lamour. Cor. Flex. 28, Corall. 156; Gray, Brit. Pl. i. 359; Templeton in lib. ix. 471; Risso, L'Europ. Mérid. v. 370.

Sp. papillaris, Montagu in Wern. Mem. ii. 90; Grant in Edin. New Phil. Journ. i. 343, and ii. 138. pl. 2, 21, 25, 26; Roget,

Bridgew. Treat. i. 149. fig. 53.

Scypha papillaris, Gray, Brit. Pl. i. 357.

Halina papillaris, Grant in Cyclop. Anat. and Phys. 1. 108. fig. 29;

and Outl. Comp. Anat. 311. fig. 108.

Spongia compacta, Sowerby's Brit. Misc. 85. pl. 42; Turt. Br. Faun. 208.

Var. 4. Johnst. Brit. Sp. 114. t. 11. fig. 5.
h, i, j. Presented by G. Johnston, M.D.

k. Dublin Bay. Presented by G. Johnston, M.D.

#### 16. Halichondria aculeata.

Halichondria aculeata, Bean MSS.; Johnst. Brit. Sp. p. 131. pl. 13. figs. 1-3, p. 247.

Inhab. ——?

## d. ÆGAGROPILA.

## 17. HALICHONDRIA FUCOTUM.

Spongia Fucorum, Esper, Spong. tab. 49. figs. 1, 2.

Halichondria fucorum, Johnst. Brit. Spon. 112. t. 9-12. fig. 2, p. 246.

Spongia parasitica, Montagu in Wern. Mem. ii. 114; Gray, Brit. Pt. i. 360; Grant in Edin. New Phil. Journ. i. 348.

Halichondria parasitica, Flem. Brit. Anim. 521; Thompson in Ann. Nat. Hist. v. 254; Bellamy's South Devon, 268.

Halispongia parasitica, Blaine. Actinol. 532.

a. On Sertularia? "Ireland, W. Thompson, Esq." Presented by G. Johnston, M.D.

b, c. On Floridea. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

d. On Fucus, Johnst. Br. Sp. t. 9. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

e. On Sertularia falcata. Liverpool, J. Rylands, Esq. Presented by G. Johnston, M.D.

f. On Conferva. Craigorad, Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.

g. Crustaceous var. Presented by G. Johnston, M.D.

A. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 18. Halichondria incrustans.

Alcyonium incrustans, Esper, Alcyon. t. 15; Lam. Anim. s. Vert. ii. 397, 2nd edit. ii. 603; Lamour. Cor. Flex. 340, Corall. 244. Halichondria incrustans, Johnst. Brit. Spon. p. 122. t. 12. fig. 3, and t. 13. fig. 5, p. 247.

Spongia fava, Montagu in Wern. Mem. ii. 115; Gray, Brit. Pl.

i. 360.

Spongia panicea, Grant in Edin. Phil. Journ. xiii. 104, xiv. 118; and in Edin. New Phil. Journ. i. 347, ii. 128, 138. pl. 2. figs. 4, 24, 27-29, copied in Blainv. Actinol. pl. 94; not Pallas.

Halichondria panicea, Flem. Brit. Anim. 520; not Johnst.

Halispongia panicea, Blainv. Actinol. 532. not robust.

b. Branched. Presented by G. Johnston, M.D. c. "Spongia fava, Mont." Presented by G. Johnston, M.D.
d. "Hal. panicea, Flem." Presented by G. Johnston, M.D.

e. "Hal. panicea, Flem." Brit. Sp. t. 12. f. 3. Presented by G. Johnston, M.D.

f, g, h. Mass with dry mucus. Presented by G. Johnston. M.D.

i. Mass, washed. Presented by G. Johnston, M.D.

j. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 19. HALICHONDRIA saburrata.

Halichondria saburrata, Johnst. Br. Sp. p. 121. t. 11. fig. 3, p. 197-247.

a. Br. Sp. t. 11. f. 3. Presented by G. Johnston, M.D.

b. Presented by G. Johnston, M.D.

c. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

## 20. Halichondria ægagropila.

Halispongia ægagropila, Scouler MSS.

Halichondria ægagropila, Johnst. Br. Sp. p. 119. t. 11. f. 1, p. 248.

a. With animal matter, Br. Sp. t. 11. f. 1. Dublin, Dr. Scouler. Presented by G. Johnston, M.D.

b, c. Washed. Ireland? Presented by G. Johnston, M.D. d. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 21. HALICHONDRIA seriata.

Spongia seriata, Grant in Edin. Phil. Journ. xiv. 116.
Halichondria seriata, Johnst. Br. Sp. p. 125. t. 14. fig. 2, p. 197-248.

a. Tenby, J. S. Bowerbank. Presented by G. Johnston, M.D.
b. Br. Sp. t. 14, f. 2. Tenby, J. S. Bowerbank. Presented

by G. Johnston, M.D.

 Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

## 22. HALICHONDRIA sanguinea.

Spongia sanguinea, Grant in Edin. New Phil. Journ. ii. 135, and 203. pl. 2. fig. 9.

Halichoudria sanguinea, Flem. Brit. Anim. 521; Johnst. Br. Sp.

134. t. 14. fig. 3, p. 248.

Halispongia sanguinea, Blainv. Actinol. 532. pl. 94. fig. 9.

a. Dublin Bay, W. Thompson, Esq. Presented by G. Johnston, M.D.

b. Abnormal form. Presented by G. Johnston, M.D.

c. Berwick Bay. Presented by G. Johnston, M.D.
 d. Dublin Bay. Presented by G. Johnston, M.D.

e. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### e. CLIONA.

## 23. HALICHONDRIA? celata.

Halichondria? celata, Johnst. Br. Sp. p. 125. fig. 13, p. 197-248.

Var. 2. Johnst. Brit. Sp. 125.

Cliona celata, Grant in Edin. New Phil. Journ. i. 78, ii. 183. pl. 2. fig. 7 (the spiculum); Flem. Brit. Anim. 516; Stark, Elem. ii. 421; Johnst. Brit. Zooph. 305. pl. 42. figs. 5, 6; Dujardin in Ann. des Sc. Nat. n. s. x. 5.

La Clione cachée, Blainv. Actinol. 527. pl. 94. fig. 7. (The spi-

culum copied from Grant.)

b, c, d. Massive and rude. Cornwall, W. C. Peach, Esq. Presented by G. Johnston, M.D.

a. In holes in shells (Cliona cinerea). Scarborough, W. Bean, Esq. Presented by G. Johnston, M.D.

e. Mass in holes in stone. Devoushire. Presented by G. Johnston, M.D.

f. g, h. Mass in holes in stone. Presented by G. Johnston, M.D.

i, j, k. In holes in shells. Presented by G. Johnston, M.D. Z. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 24. HALICHONDRIA hystrix, Johnst. MSS.

- a. Small round mass. Presented by G. Johnston, M.D.
- b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### f. SUBERULA.

#### 25. HALICHONDRIA coslita.

Spongia coalita, Müll. Zool. Dan. Prod. 256; Zool. Dan. iii. 71. t. 120; Turt. Gmel. iv. 662; Montagu in Wern. Mem. ii. 80; Bosc. Vers, iii. 177; Lam. Anim. s. Vert. ii. 382, 2nd edit. ii. 572; Lamour. Cor. Flex. 80, Corall. 184; Parkins. Oryctol. 47; Grant in Edin. Phil. Journ. xiv. 118, and in Edin. New Phil. Journ. ii. 123.

Tupha coalita, Gray, Brit. Pl. i. 355.

Halichondria coalita, Flem. Brit. Anim. 522; Bellamy's South Devon, 268; Johnst. Br. Sp. 135. t. 12. f. 1, p. 249.

Halispongia coalita, Blainv. Actinol. 532.

Spongia suberosa, Esper, Spong. t. 41.

- a. Br. Sp. t. 12. f. 1. Frith of Forth? Presented by G. Johnston, M.D.
- b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

## 26. Halichondria virgultosa.

Spongia virgultosa, Lam. Anim. s. Vert. ii. 375, 2nd edit. ii. 565;
Lamour. Cor. Flex. 66, Corall. 177; Parkins. Oryctol. 44.
Halichondria virgultosa, Johnst. Brit. Sp. 137. t. 15. figs. 1-3, pp. 197, 249.

a. Brit. Sp. t. 15. figs. 1 and 2. Scarborough, W. Bean, Esq.

Presented by G. Johnston, M.D.

Spicula of α, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

## 27. Halichondria hirsuta.

Halichondria hirsuta, Flem. Brit. Anim. 522; Johnst. Brit. Sp. p. 138. t. 16. fig. 1, p. 249.

Infab. deep water, Zetland, Fleming; Ireland, Thompson. Mus. W. Thompson.

## 28. HALICHONDRIA domuncula.

Spongia suberea, Montagu in Wern. Mem. ii. 100.
 Halichondria suberea, Johnst. Brit. Sp. p. 139, t. 12. figs. 5, 6, p. 141. fig. 14, and pp. 197, 249.

Sp. suberosa, Gray, Br. Pl. 361.

Halichondria suberica, Flem. Brit. Anim. 522; Coldstream in Edinb. New Phil. Journ. ix. 235. pl. 2. figs. 3-5; Thompson in Ann. Nat. Hist. v. 254; Bellamy's South Devon, 268.

Halispongia suberica, Blainv. Actinol. 532.

Aleyonium domuncula, Olivi, Adriad. 241; Lam. Hist. ii. 4, ed. 2. ii. 600.

Anthelia domuncula, Blainv. Dict. Sci. Nat. lx. 487.

Spongia domuneula, Lamour, Cor. Flex. 28.

Aleyonium bulbosum, Esper, Aleyon. p. 41. t. 12. figs. 1-6.

Aleyonium tuberosum, Esper, Aleyon. t. 13. figs. 1-6.

Aleyonium compactum, Lam. Anim. s. Vert. ii. 400, 2nd edit. ii. 606; Lamour. Cor. Flex. 354, Corall. 251; Parkins. Oryctol. 59.

a. On a shell. Presented by G. Johnston, M.D.

b. On a shell. Brit. Sp. t. 12. fig. 6. Presented by G. Johnston, M.D.

c. On a shell. Brit. Sp. t. 12. fig. 5. Presented by G.

Johnston, M.D.

d. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

e. In spirits. Aberystwyth. Presented by the Rev. J. Henslow.

Var. not on a shell.

Halichondria carnosa, Johnst. Brit. Sp. p. 146. t. 13. figs. 7, 8, p. 249.

H. suberea, var. Bowerbank MSS.

a. e. In spirits. Presented by G. Johnston, M.D.

f. Spicula of e, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

# 29. HALICHONDRIA mammillaris.

Spongia mammillaris, Müll. Zool. Dan. iv. 44. tab. 158. figs. 3, 4; Lamour. Cor. Flex. 59, Corall. 173; Thompson in Ann. Nat. Hist. v. 254.

Halichondria mamillaris, Johnston, p. 142. t. 16. fig. 2, p. 249. Spongia Penicillus, Montagu in Wern. Mem. ii. 93. pl. 13. fig. 7; Flem. Brit. Anim. 526; Templeton in Mag. Nat. Hist. ix. 471. Spongia mammiferis, Parkinson's Oryctology, 43.

Spongia Imperati, D. Chiaje, Anim. s. Vert. Nap. iii. 114. tav. 37.

figs. 18 and 23. Tethya? penicilliformis, Gray, Brit. Pl. i. 362.

Inhab. --?

#### 30. HALICHONDRIA Ficus.

Alcionio tuberoso in forma di fico, Imperat. Ital. 641. fig. inf. Sponge called the Sea Fig, Ellis and Soland. Zooph. 206. pl. 59. fig. 4.

Alcyonium Ficus, Bsper, Alcyon. tab. 20. figs. 1-4; copied Johnst. Brit. Sp. t. 77. fig. 11; Lamour. Cor. Flex. 348; not Pallas. Halichondria Ficus, Johnst. Brit. Sp. p. 144. t. 15. figs. 4 and 5,

and p. 249.

Alcyonium ficiforme, Lam. Anim. s. Vert. ii. 394; edit. 2, ii. 599. Spongia ficiformis, Lamx. Cor. Flex. 47; Expos. Meth. 29. t. 59. f. 4.

Choanites Ficus, Mantell, Geol. Sussex, 179.

- a. Scarborough, Brit. Sp. t. 15. fig. 4. W. Bean, Esq. Presented by G. Johnston, M.D.
- b. In primary state? Presented by G. Johnston, M.D.
- c. Spicula in Canada balsam. Prepared by J. S. Bower-bank, Esq.
- d, e. In spirits. "Mammaria," Leach MSS. Presented by J. Cranch, Esq.

#### 31. HALICHONDRIA SEVOSA.

Halichondria sevosa, Johnst. Brit. Sp. p. 147. t. 16. figs. 3, 4, pp. 198, 249.

36 a. Brit. Sp. t. 13. fig. 3. Isle of Man. E. Forbes, Esq.

Presented by G. Johnston, M.D.

b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 32. Halichondria maculans.

Halichondria maculans, Johnst. MSS.

- a. On a shell. Berwick Bay. Presented by G. Johnston, M.D.
- b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

# Species requiring further examination.

#### 33. HALICHONDRIA? aurea.

Spongia aurea, Montagu in Wern. Mem. ii. 86; Flem. Brit. Anim. 526.

Tupha aurea, Gray, Brit. Pl. i. 356.

Halichondria? aurea, Johnst. Brit. Sp. pp. 131, 248.

Inhab. ——?

#### 34. HALICHONDRIA? Conus.

Spongia Conus, Montagu in Wern. Mem. ii. 85. pl. 10; Flem. Brit. Anim. 526.

Tupha conica, Gray, Brit. Pl. i. 356.

Halichondria? Conus, Johnst. Brit. Sp. pp. 132, 248.

Inhab. - ?

# 35. HALICHONDRIA? rigida.

Spongia rigida, Montagu in Wern. Mem. ii. 87. pl. 11. figs. 1, 2; Flem. Brit. Anim. 526.

Tupha rigida, Gray, Br. Pl. i. 356.

Halichondria? rigida, Johnst. Brit. Sp. pp. 132, 248.

Inhab. ——?

# 36. HALICHONDRIA? perlævis.

Spongia perlavis, Montagu in Wern. Mem. ii. 86; Flem. Brit. Anim. 526.

Tupha perlavis, Gray, Brit. Pl. i. 356.

Halichondria perlavis, Johnst. Brit. Sp. pp. 133, 248.

H. seriata var.?, Johnst. loc. cit. 248.

Inhab. -- ?

#### 5. BADIAGA.

Badiaga, Buxbaum, Comm. Acad. Petrop. ti. 1727, 343; Spengler, Syst. Veg. iv. 374, 1827.

Halichondria, sp. Flem. B. A. 524, 1828.

Spongilla, Lam. Hist. Anim. s. Vert. ii. 98, 1816, edit. 2, ii. 111; Blainv. Man. Actinol. 533-683; Schweig. Handb. 421; Johnst. Brit. Sp.; Gray, Brit. Plants, i. 353.

Spongia pars, Linn. S. N. 1299.

Cristatella, Lamk. Syn. 385, 1801 (Sponge not animal), not 1816; Lamx. Bull. Soc. Phil. ii. 182, 1812; not Cuv. Tabl. Elem. 1798. Tupha, Oken, Lehrb. 1815; Schweig. Handb. 421; not Gray, 1820. Ephydatia, Lamour. Cor. Flex. 2, 1816.

# 1. BADIAGA fluviatilis.

Spongia fluviatilis, Pall. Elench. 384; Linn. Syst. 1299; Berk. Syn. i. 213; Turt. Gmel. iv. 662; Blumenb. Man. 272; Bosc. Vers. iii. 178.

Badiaga fluviatilis, Spreng. Syst. Veg. iv. 374. Ephydatia fluviatilis, Lamour. Cor. Flex. 6, Corall. 148.

Halichondria fluviatilis, Flem. Brit. Anim. 524.

Spongilla fluviatilis, Johnst. Brit. Sp. 159. t. 17, 18, p. 250.

Les Eponges d'eau donce, Gerrais in Ann. des Sc. Nat. u. s. iv. 254.

Spongilla ou Éponge d'eau douce, Dujardin in Ann. des Sc. Nat.

n. s. x. 4. pl. l. figs. 1-4.

Cristatella, ou Eponges fluviatiles, Lamx. Bull. Soc. Phil. iii. 182. Var. a. Sponge crustaceous, massive and slightly lobed, or throwing up short branches. Johnst. Brit. Sp. t. 17.

Spongia fluviatilis anfractuosa, perfragilis, ramosissima nostras,

Plunk. Phytog. tab. 112. fig. 3.

Spongia fluviatilis ramosa fragilis, Raii Hist. Pl. iii. 16; Syn. i. 30. no. 6.

Fungus vel potius Spongia viridis, doliolis adnascenti similis,

Raii Syn. i. 57. no. 11.

Spongia lacustris, Linn. Flor. Suec. 439. no. 1190; Fl. Lapp. 389; Syst. Nat. 1299; Esper, Spong. tab. 23 A. figs. 1-11; Berk. Syn. i. 213; Turt. Gmel. iv. 662; Turt. Brit. Faun. 209; Stew. Elem. ii. 435; Bosc. Vers, iii. 178; Link in Ann. des Sc. Nat. n. s. Bot. ii, 328.

Badiaga major, Buxbaum, l. c. 343.

Spongia friabilis, Esper, Spong. tab. 62. figs. 1-4; Turt. Gmel. iv. 662; Bosc. Vers, iii. 178.

Ephydatia lacustris, Lamour, Cor. Flex. 7, Corall. 149.

Ephydatia friabilis, Lamour. Cor. Flex. 6, Corall. 148. Spongilla friabilis, Lam. Anim. s. Vert. ii. 100, 2nd edit. ii. 114; Risso, L'Europ. Mérid. v. 367; Grant in Edinb. Phil. Journ. ii. 138. pl. 2. fig. 1 (the spiculum), copied in Blainv. Atlas, pl. 94. fig. 1; Blainv. Man. 534; Schweig. Handb. 421; Templeton in Mag. Nat. Hist. ix. 470; Stark, Elem. ii. 442.

Spongilla pulvinata, Lam. Anim. s. Vert. ii. 99, 2nd edit. ii. 113;

Gray, Brit. Pl. i. 353.

Spongilla fluviatilis, Blainv. Actinol. 534. pl. 92. fig. 6; Hogg's Stockton, 39; Hogg in Ann. Nat. Hist. i. 478, ii. 370, iii. 58 and 459, vi. 315; Hogg in Trans. Linn. Soc. xviii. 363, and in Charlesworth's Mag. Nat. Hist. iv. 259; Johnst. Brit. Sp. p. 159. pl. 17 & 18.

Spongilla lacustris, Blainv. Actinol. 534.

Var. \(\beta\). Erect and branched, plant-like. Johnst. Brit. Sp. t. 18. Spongia ramosa fluviatilis Newtoni, Raii Hist. Pl. i. 81; Syn. i. 30. no. 5.

Badiaga cinerea, Buxbaum, l. c. ii. 343.

Spongia fluviatilis?, Linn. Fl. Suec. 440, no. 1191.

Spongia lacustris, Esper, Spong. tab. 23. figs. 1, 2.

Spongia canalium, Turt. Gmel. iv. 662; Bosc. Vers, iii. 179.

Ephydatia canalium, Lamour. Cor. Flex. 6, Corall. 148; Fleming in Edinb. Phil. Journ. ii. 88; Flem. Phil. Zool. ii. 614. pl. 5. fig. 4. Spongilla ramosa, Lam. Anim. s. Vert. ii. 100, 2nd edit. ii. 114; Gray, Brit. Pl. i. 353; Dutrochet in "Ann. des Sc. Nat. 1828,

p. 205," Bull. des Sc. Nat. xvii. 156; Stark, Elem. ii. 442.

Badiaga minor, Buxbaum, Comm. Petrop. ii. 1727, 343; Cent. v. 12. t. 23. fig. 2.

Spongilla canalium, Blainv. Actinol. 534. Spongilla lacustris, Schweig. Handb. 421.

Spongilla pulvinata, Templeton in Mag. Nat. Hist. ix. 470. a. Northumberland. Presented by G. Johnston, M.D.

b.? Presented by G. Johnston, M.D.

c. Erect, branched. Goole, W. Bean, Esq. Presented by G. Johnston, M.D.

d, e. Massive. Presented by G. Johnston, M.D.

f. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

g. In spirits. Presented by J. E. Gray, Esq.

#### 2. BADIAGA lacustris.

Spongilla lacustris, Johnst. Brit. Sp. pp. 162, 250. Spongia lacustris, "Don's Animals of Forfarshire, 36." Halichondria lacustris, Flem. Brit. Anim. 524.

#### 6. SPONGIA.

Spongia pars, Linn.
Achilleum, Schweig. Beobacht. vii., Handb. 421; not Oken.
Spongia, Lamk. Syst. 1801; Lamour. Bull. Soc. Phil. 1812;
Flem. Brit. Anim. 524, 1828; Blainv. Man. 529; Johnst. Brit. Sp. pp. 164, 250.

# 1. SPONGIA pulchella.

Spongia pulchella, Sowerby, Brit. Misc. S7. pl. 43; Jameson in Wern. Mem. i. 562; Turt. Brit. Faun. 208; Montagu in Wern. Mem. ii. 109; Gray, Brit. Plants, i. 359; Flem. Brit. Anim. 524; Templeton in Mag. Nat. Hist. ix. 471; Bellamy's S. Devon, 268; Johnst. Brit. Sp. p. 167. t. 19. figs. 1, 2 (p. 171. fig. 16?), p. 250.

a. Washed. Presented by G. Johnston, M.D.

b. Washed. Brit. Sp. t. 29. fig. 2. Berwick Bay? Presented by G. Johnston, M.D.

# 2. Spongia limbata.

Spongia limbata, Montagu in Wern. Mem. ii. 111, pl. 15. figs. 2, 3;
 Gray, Brit. Pl. i. 360; Flem. Brit. Anim. 526; Johnst. Brit.
 Sp. 168. t. 19. figs. 3, 4, 5, p. 250.

Spongia lobata, Montagu in Wern. Mem. ii. 85. pl. 9. fig. 1; Flem. Brit. Anim. 526.

Tupha lobata, Gray, Brit. Pl. i. 356.

a. Var. Berwick Bay. Presented by G. Johnston, M.D.

- b. Small mass, washed. Devonshire. Presented by G. Johnston, M.D.
- c, d & e. Mass, washed. Presented by G. Johnston, M.D. f. Rounded mass with dry mucus. Presented by G. Johnston, M.D.

# 3. Spongia? lævigata.

Spongia lævigata, Montagu in Wern. Mem. ii. 95. pl. 16. fig. 4; Flem. Brit. Anim. 526; Johnst. Brit. Sp. pp. 170, 250. Scypha lævigata, Gray, Brit. Pl. i. 358. Inhah. ——?

#### Dubia?

? Spongia prolifera, Grant, Edinb. Phil. Journ. xiv. 116 (not Solander and Ellis); not described. Inhab. ----?

#### 7. Dysidea.

Duseideia, Johnston, 1842, p. 185. Dysidea, Johnston, 1842, p. 251.

# Dysidea fragilis.

Spongia fragilis, Montagu in Wern. Mem. ii. 114. pl. 16. figs. 1, 2; Gray, Brit. Pl. i. 360; Flem. Brit. Anim. 526; Templeton in Mag. Nat. Hist. ix. 471.

Duseideia fragilis, Johnst. Brit. Sp. p. 187. t. 13. fig. 6, and t. 14.

Dysidea fragilis, Johnst. Brit. Sp. 251.

Halichondria areolata, Johnst. Brit. Sp. 121. t. 13. fig. 4, pp. 197 and 247.

a, b, c, d. Washed. Presented by G. Johnston, M.D.

e, f, g, h, i, with the mucus preserved to dry. Presented by G. Johnston, M.D.

j, with mucus in spirits. Presented by G. Johnston, M.D.

k. "Halichondria areolata."

1. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq. a. "Hal. areolata." Portaferry, Strangford Lough, W.

Thompson, Esq. Presented by G. Johnston, M.D.

# 2. Dysidea? papillosa.

Spongia suberea, Johnst. in Mag. Nat. Hist. vii. 491. fig. 60.Dusculeia papillosa, Johnst. Brit. Sp. t. 16. figs. 6, 7, pp. 190, 191.fig. 18.

Dysidea? papillosa, Johnst. Brit. Sp. 251.

a. On fragment of a shell. Scarborough. Presented by G. Johnston, M.D.

 Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 8. HALISARCA.

Halisarea, Dujard. 1847; Johnst. Brit. Sp. 1847.

# 1. HALISARCA Dujardinii.

Halisarca, Dujardin in Ann. des Sc. Not. n. s. x. 7. pl. 1. fig. 5.
Hal. Dujardinii, Johnst. Brit. Sp. p. 192. t. 16. fig. 8, p. 61. fig. 9, p. 251.
Inhab. ——.

#### Order II. CALCAREA.

Fam. 2. GRANTIADE.

#### 9. GRANTIA.

Grantia, Flem. Brit. An. 524, 1828; Johnst. Brit. Sp. pp. 172, 251. Leucalia, Grant in Edinb. Encyclop. xviii. 844. Leuconia, Grant, Outl. Comp. Anat. 7. Calcispongia, Blainv. Diet. Se. Nat. lx. 1830; Man. 530. Spongia pars, Linn., Lam., Lamour. Scypha pars, Gray, Brit. Pl. i. 357. Scyphia pars, Schweig. Handb. 422, 1820.

# 1. Grantia compressa.

Spongia compressa, Fabric. Faun. Grænl. 448; Turt. Gmel. iv. 661; Bosc. Vers. iii. 176; Jameson in Wern. Mem. i. 562; Lamour. Cor. Flex. 48, Corall. 168; Grunt in Edinb. New Phil. Journ. i. 166, and ii. 122, 127. pl. 2. figs. 11, 12, 13 and 23; copied in Blainv. Atlas., pl. 94; not Esper.

Spongia foliacea, Montagu in Wern. Mem. ii. 92. pl. 12; Templeton in Mag. Nat. Hist. ix. 471; not Esper.

Scypha foliacea, Gray, Brit. Pl. i. 358.

Grantia compressa, Flem. Br. Anim. 524; Johnst. in Trans. Newc. Soc. ii. 270; Brit. Sp. 174. t. 20. tig. 1, p. 251; Bellamy's South Devon, 268; Hassall in Ann. Nat. Hist. vi. 174.

Leuconia compressa, Grant's Outl. Comp. Anat. p. 7. fig. 3.

Calcispongia compressa, Blainv. Actinol. 531.

Spongia urceolus, Müller, Zool. Dan. iv. 42. t. 157. fig. 3, 7 var.

- a-e. Brit. Sp. t. 20. fig. 1. Berwick Bay. Presented by G. Johnston, M.D.
- f. In spirits. Presented by G. Johnston, M.D.
- g. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 2. Grantia lacunosa.

Grantia lacunosa, Bean MSS.; Johnst. Brit. Sp. p. 176. t. 20. figs. 2, 3, p. 251.

a. Brit. Sp. t. 20. figs. 2, 3. Scarborough, W. Bean, Esq.

Presented by G. Johnston, M.D.

b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 3. GRANTIA ciliata.

Spongia ciliata, Fabric. Faun. Grænl. 448; Turt. Gmel. iv. 657; Bosc. Vers, iii. 169; Lamour. Cor. Flex. 55, Corall. 151.

Spongia coronata, Ellis and Soland. Zooph. 190. pl. 58. figs. 8, 9, copied in Esper, Spong. tab. 61. figs. 5, 6; Turt. Gmel. iv. 657; Turt. Brit. Faun. 208; Stew. Elem. ii. 433; Bosc. Vers, iii. 169; Montagu in Wern. Mem. ii. 88; Lamour. Cor. Flex. 54, Corall. 171; Lam. Anim. s. Vert. ii. 370, 2nd edit. ii. 560; Schweig. Beobacht. 80. tab. 5. fig. 47, opt.!; Grant in Edin. New Phil. Journ. i. 170, ii. 122. pl. 2. figs. 17, 18; copied in Blainv. Atlas, pl. 94. figs. 17, 18.

Spongia panicea, Esper, Spong. tab. 18. figs. 1, 2.

Scypha coronata, Gray, Brit. Pl. i. 357.

Grantia coronata, Hassall in Ann. and Mag. Nat. Hist. vi. 174.

Grantia ciliata, Flem. Brit. Anim. 325; Johnst. in Trans. Newc. Soc. ii. 271; Bellamy's South Devon, 269; Thompson in Ann. Nat. Hist. v. 254; Johnst. p. 176. t. 20. f. 4, 5, t. 21. f. 6, 7, and p. 1. f. 1, p. 252.

Calcispongia ciliata, Blainv. Actinol. 531.

Spongia fistulosa, Chiaje, Anim. Nap. iii. 113. t. 37. f. 14, 15.

- a, b, c. On Conferva. Ireland, W. Thompson, Esq. Presented by G. Johnston, M.D.
- d. With G. compressa. Presented by G. Johnston, M.D. e, f, g. On Fucus. R. Orwell, Essex. Presented by W. B. Clarke, M.D.
- h, i, k. In spirits. Presented by G. Johnston, M.D.

l. In spirits. Presented by G. Johnston, M.D.

m. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

# 4. GRANTIA pulverulenta.

Spongia ananas var., Montagu in Wern. Mem. ii. 97. pl. 16. fig. 3. Sp. pulverulenta, Grant in Edin. New Phil. Journ. i. 170.

Seypha ovata, Gray, Brit. Pl. i. 358.

Grantia pulverulenta, Flem. Brit. Anim. 525; Bellamy's South Devon, 269; Johnst. Brit. Sp. 180, 252.

Spongia inflata, Della Chiaje, Anim. s. Vert. Nap. iii. p. 114.

tav. 37. figs. 16, 17.

Var.? Spongia ananas, Mont. Wern. Trans. ii. 96. t. 16. figs. 1,2; Johnst. Brit. Sp. 181.

Grantia ananas, Fleming, B. A. 525.

Inhab. -- ?

#### 5. GRANTIA fistulosa.

Grantia fistulosa, Johnst. Brit. Sp. p. 181. t. 20. fig. 7, p. 252.

a. Portaferry, Ireland, W. Thompson. Presented by G.

Johnston, M.D.

b. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

# 6. GRANTIA botryoides.

Spongia botryoides, Ellis and Soland. Zooph. 190. pl. 58. figs. 1-4; copied in Esper, Spong. tab. 61. figs. 1-4; Turt. Gmel. iv. 660; Turt. Brit. Faun. 209; Stew. Elem. ii. 434; Bosc. Vers. iii. 173; Montagu in Wern. Mem. ii. 89; Lamour. Cor. Flex. 81, Corall. 184; Lam. Anim. s. Vert. ii. 382, 2nd edit. ii. 573; Templeton in Mag. Nat. Hist. ix. 471.

Sp. complicata, Montagu in Wern. Mem. ii. 97. pl. 9. figs. 2, 3;
 Gray, Brit. Pl. i. 358; Grant in Edin. New Phil. Journ. i. 169.
 Spongia confervicola, Templeton in Mag. Nat. Hist. ix. 470. f. 67.

Seypha botryoides, Gray, Brit. Pl. i. 357.

Grantia botryoides, Flem. Brit. Anim. 525; Johnst. in Trans. Newc. Soc. ii. 270; Bellamy's South Devon, 268; Johnst. Brit. Sp. p. 179. t. 21. figs. 1-5, p. 252.

Calcispongia botryoides, Blaine. Actinol. 531.

a & g. Br. Sp. t. Bangor, W. Thompson, Esq. Presented by G. Johnston, M.D.

b. On slate, Br. Sp. t. 21. f. 3. Holy Island. Presented by

G. Johnston, M.D.

c, d. On slate. Holy Island. Presented by G. Johnston, M.D.

c, f. On Fucus. Berwick Bay. Presented by G. Johnston. M.D.

 Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### 7. GRANTIA nivea.

Spongia nivea, Grant in Edin. Phil. Journ. xiv. 339; and in Edin. New Phil. Journ. i. 168, and ii. 139. pl. 1. figs. 14-16; copied in Blainv. Actinol. pl. 94.

Grantia nivea, Flem. Brit. Anim. 525; Johnst. Brit. Sp. p. 182.

pl. 21. fig. 8, p. 252.

Calcispongia nivea, Blainv. Actinol. 531.

a & b. Presented by G. Johnston, M.D.

c. Var. cristata, Br. Sp. t. 20. f. 6. Mr. M'Caila. Presented by G. Johnston, M.D.

d. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

#### S. GRANTIA coriacea.

Spongia coriacca, Montagu in Wern. Mem. ii. 116; Gray, Brit. Pl. i. 361; Flem. Brit. Anim. 526.

Grantia multicavata, Bean MSS.

Grantia coriacea, Johnst. Brit. Sp. p. 183. t. 21. fig. 9, p. 252.

a, b. Br. Sp. t. 21. f. 9. Berwick Bay. Presented by G. Johnston, M.D.

c. In spirits. Presented by G. Johnston, M.D.

d. Spicula of a, in Canada balsam. Prepared by J. S. Bowerbank, Esq.

# APPENDIX.

Foreign Specimens accidentally introduced into the Fauna.

Spongia prolifera, Solander and Ellis, t.; Templeton, Mag. Nat. Hist. ix. 472; Johnst. Br. Sp. 170.

Inhab. Belfast, from a ship.

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# LIST

OF THE

# **SPECIMENS**

OF

# BRITISH ANIMALS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

PART III.—BIRDS.

PRINTED BY ORDER OF THE TRUSTEES.

LONDON, 1850.

#### LONDON:

PRINTED BY EDWARD NEWMAN, 9, DEVONSHIRE ST., BISHOPSGATE.

# INTRODUCTION.

THE principal object of the present Catalogue has been to give a complete list of all the birds that have been recorded as found in Great Britain, indicating at the same time those species that are contained in the collection, and pointing out their peculiarities as regards age, sex, habitat, and the source from whence the specimens were obtained, which are mentioned after the specific name and its synonyma, while the localities of those species not at present contained in the collection are also recorded.

Those specimens which have been presented to the Museum have the name of the donor; and in general the collection from whence the specimen has been purchased is also marked, as it often gives some authenticity to its history. The skeletons and breast-bones, &c., which are contained in the collection, are also given under the separate species to which they belong. In the adoption of the generic and specific names, it has been though

right to use, wherever it was possible, that which was first applied to the species. Great attention has been paid to consult the original authority, to know the type, and select the name which appeared to be the most ancient, and reference is made to the work in which, and the date when, each genus and its synonyma were respectively published.

Under each species there have been appended all the names under which the bird has been mentioned since the establishment of the Linnean system and nomenclature, and references are given to the works in which these were first used, and especially to the various works treating on British animals in which they are mentioned, as well as to the various other works on Ornithology which it was thought might prove of use in establishing the identity of species found in other parts of the world.

These are followed by a reference to a few of the best of the original figures of the species.

This Catalogue has been prepared by Mr. George Robert Gray, the Senior-assistant in the department.

JOHN EDWARD GRAY.

British Museum, June 1st, 1850.

# LIST OF SPECIES.

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- 10. Accipiter nisus, 18. 11. Circus cyaneus, 19.
- 12. Circus cineraceus, 21.
- Circus æruginosus, 21.
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- 5. Athene noctua, 25.
- 6. Nyctale funerea, 25. 7. Ephialtes scops, 26.
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57. Ardea comata, 162.

39. Ardea minuta, 163.

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61. Ciconia nigra, 167.

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85. Numenius phæopus, 169.

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- 20. Ectopistes migratorius, 131.
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- 24. Botaurus lentiginosus, 164.

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- 26. Tringa pectoralis, 183.
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- 29. Plectropterus gambensis, 202.
- 30. Chenalopex ægyptiaca, 202.
- 31. Bernicla ruficollis, 204.
- 32. Bernicla canadensis, 205.
- Cygnus americanus, 209.
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# APPENDIX.

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Calamodyta Cetti; inserted on the authority of Temminck. An example of this species, however, is not known in any British collection.

# Page 50, add

CALAMODYTA ARUNDINACEA. The Reed Thrush.

Motacilla arundinacea, Linn. S. N. i. p. 296. Sylvia turdoïdes, Meyer, Vög. Liv. and Estland. p. 116. Turdus arundinaceus, Gmel. S. N. i. p. 834.

Acrocephalus lacustris, Naum. Salicaria turdina, Schleg.

Thrush Nightingale, Hancock, Ann. & Mag. Nat. Hist. 1847, p. 135; Zoologist, 1847, p. 1875.

(Swalwell, near Newcastle, and Northamptonshire?)

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SYLVIA HIPPOLAIS. The Lesser Pettichaps.

Motacilla hippolais, Linn. S. N. i. p. 330.
Sylvia hippolais, Lath. Ind. Orn. ii. p. 507; Temm. (not Penn.)
Man. d Orn. p. 222; Plomley, Zoologist, 1848, p. 2228.
Melodious Willow Wren, Plomley.

(Erythrone, near Dover).

#### APPENDIX.

#### Page 132.

The late Mr. Donovan, in his work on 'British Birds,' has figured a species of Turtle, under the name of Columba albonotata, pl. 149. Latham, in his 'History of Birds,' has referred to it as a variety of Common Turtle. The example from which the figure was made, is said to have been shot in Buckinghamshire.

Page 165, add (on the authority of Mr. Selby),

NYCTICORAX VIOLACEA. The Cayenne Night-Heron. Ardea violacea, Linn. S. N. i. p. 238. Ardea cayanensis, Lath. Ind. Orn. ii. p. 680 (?). Ardea callocephala, Wagl. Syst. Av. Nycticorax cayanensis, Selby, Brit. Birds (1833), ii. p. 43. Cayenne Night Heron, Selby, Brit. Birds, ii. p. 43.

Yellow-crowned Heron, Penn. Arct. Zool. ii. p. 352.

(Yarmouth).

#### CORRECTIONS.

#### Page 12.

Erase from Falco gyrfalco, — a, b. Iceland. From Mr. Lead-beater's collection.

# Page 41.

Ceryle alcyon, for Ann. & Mag. Nat. Hist. (1847), read (1844), p. 430 (1845), p. 69, and (1846), p. 313.

# Page 44.

Sitta europæa. If considered distinct from the Linnean species, should be called S. cæsia.

# Page 51 & 52.

For Staparola, read Sterparola.

Page 181. To the synonyma of Tringa, add

Schæniclus, Mæhr. (1752). Limicola, Koch, (1815).

Pelidna, Cuv. (1817).

# CATALOGUE

OF

# BRITISH BIRDS.

# CLASS AVES.

# ORDER I. ACCIPITRES.

Accipitres, Linn. (1735); Mæhr. (1752); Lath. (1790); Cuv. (1795—1796).

Dermatopodes, Mæhr. (1752).

Plumipedes, pt. Schæff. (1774).

Fissipedes anisodactyles, aduncirostres, Schæff. (1774).

Retipedes, pt. Scop. (1777).

Rapaces, Scop. (1777); Temm. (1815); Ranz. (1823).

Raptatores, Illig. (1811).

Raptores, Vigors (1826).

Raptrices, Macgill. (1840).

# SUB-ORDER 1. ACCIPITRES DIURNI.

Accipitres diurni, Vicill. (1816); Cuv. (1817).
Nudicolles—Plumicolles—Grallæ pt. — Brevirostres, Cuv. (1799—
1800).
Vulturini—Accipitrini, Illig. (1811).
Grallatores pt.—Uncirostres pt. Vicill. (1816).
Diurni, Ranz. (1823).

# FAM. I. VULTURIDÆ.

# i. VULTURINE.

#### 1. GYPS.

Gyps, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 71 (1809).

#### GYPS FULVUS. The fulvous Vulture.

Vultur fulvus, Gmel. S. N. i. p. 249; Temm. Man. d'Orn. 1815, p. 3; Brehm, Vog. Deuts. i. p. 9; Naum. Vog. Deuts. (1822), i. p. 162, t. 2; Pr. Bonap, Geogr. Comp. List of B. p. 2; Keys. & Bl. Wirbelth, Eur. p. 26; Schleg. Rev. Crit. des Ois. d Eur. p. 12. Thomps. Ann. & Mag. Nat. Hist. xv. 1845, p. 308.

Vultur leucocephalus, Meyer, Taschenb. Deuts. i. p. 7.

Vultur albicollis, Linderm. Isis (1843), p. 324. Vultur percnopterus, Daud. Tr. d'Orn. ii. p. 13.

Vultur vulgaris, Daud, Tr. d'Orn. ii. p. 16.

Vultur trincalos, Bechst. Naturg. Deuts. ii. p. 479. Vultur persicus, Pall. Zoogr. i. p. 377. Vultur indicus, Temm. Pl. col. 26.

Vultur Kolbii, Daud. Tr. d'Orn. ii. p. 15.

Gyps vulgaris, Sav. Descr. d'Egypte, Hist. Nat. i. p. 71.

Gyps fulvus, G. R. Gray, List of Gen. of B. (1840), p. 1; Gen. of B. i. p. 5.

The Griffon Vulture, Yarr. Brit. B. 2 edit. i. p. 1, fig.; Newm. Zool. 1845, p. 986, fig.

Pl. enl. 426; Levaill. Ois. d'Afr. t. 10; Gould, B. of Eur. pl. 1. (Rocks near Cork Harbour).

# ii. NEOPHRONINÆ.

# 1. NEOPHRON.

Neophron, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 77 (1809) Percnopterus, Cuv. Reg. An. (1817), i. p. 307.

#### NEOPHRON PERCNOPTERUS. The Alpine Vulture.

Vultur percnopterus, Linn. S. N. i. p. 123.

Vultur stercorarius, Lapeyr. Neue Schwed. Abh. iii. p. 100).

Vultur leucocephalus, Briss. Orn. i. p. 466.

Vultur fuscus, Bodd. Tabl. des Pl. enl. de D'Auben. p. 28. Vultur ginginianus, Daud. Tr. d'Orn. ii. p. 20.

Vultur albus, Daud. Tr. d'Orn. ii. p. 20.

Vultur meleagris, Pall. Zoogr. i. p. 377, t. 14. Cathartes percnopterus, Temm. Man. d'Orn. (1815) p. 5; Brehm, Vog. Deuts, i. p. 5, t. 1, f. 1; Naum. Vog. Deuts. (1822) i. p. 170, t. 3; Schleg. Rev. Crit. des Ois. d'Eur. p. 11.

Percnopterus ægyptiacus, Steph. Gen. Zool. xiii. p. 7.

Neophron percnopterus, Sav. Descr. de l'Egypte, Hist. Nat. p. 16; Macgill. Hist. Brit. B. iii. p. 166; Jenyns, Man. B. Vert. An. p. 79; Eyton, Cat. Brit. B. p. 1; Pr. Bonap. Geogr. Comp. List of B. p. 1; Keys. & Bl. Wirbelth. Eur. p. 26.

Vultur albicans, Meisner.

Egyptian Vulture, Eyton, Hist. R. Brit. B. p. 1; Yarr. Brit. B. 2 edit. i. p. 6, fig., & p. 10, fig.

Alpine Vulture, Bew. Brit. B. (1832) i. p. 15.

Pl. enl. 427, 429; Jard. & Selby, Ill. Orn. pl. 33; Gould, B. of Eur. pl. 3; Levaill. Ois. d'Afr. t. 14. (Shores of the Bristol Channel).

# FAM. II. FALCONIDÆ.

# i. Aquilinæ.

# 1. AQUILA.

Aquila, Mæhr. Av. Gen. p. 49 (1752); Briss. Orn. i. p. 419 (1760). Aëtos, Nitzsch, Pterylog. p. 31 (1840). Onichaëtus, Kaup, Člassif. der Säug. und Vög. p. 120 (1844). Ictinaëtus, Jerd. Madr. Journ, Lit, and Sci. p. 117 (1844). Uroaëtus, Kaup, Classif. der Säug. und Vög. p. 121 (1844). Pteroaëtus, Kaup, Classif. der Säug. und Vög. p. 120 (1844). Hieraëtus, Kaup, Classif. der Säug. und Vög. p. 120 (1844). Heteropus, Hodgs, Journ. A. S. B. (1842) p. 881. Neopus, Hodgs. Gray, Zool. Misc. (1844) p. 81. Tolmaëtus, Blyth, Journ. A. S. B. (1845) p. 5. Eutolmaëtus, Blyth.

#### a. AQUILA.

# 1. Aquila Chrysaetos. The golden Eagle.

Aquila chrysaëtos, Pall. Zoogr. p. 341; Flem. Brit. An. p. 52; Jenyns, Man. B. Vert. An. p. 80; Brehm, Vog. Deuts. i. p. 21; Macgill. Hist. Brit. B. iii. p. 204; Eyton, Cat. Brit. B. p. 2; Pr. Bonap. Geogr. Comp. List of B. p. 2; Keys. & Bl. Wirbelth. Eur. p. 30; G. R. Gray, Gen. of B. i. p. 13. Falco chrysaetos, Linn. S. N. i. p. 125.

Falco melanaëtos, Linn. S. N. i. p. 124.

Falco fulvus, Linn. S. N. i. p. 125; Naum. Vog. Deuts. (1822) i. p. 208, t. 8, 9.

Falco canadensis, Linn. S. N. Ed. 10, p. 88. Aquila nobilis, Pall. Zongr. i. p. 338, t. 8.

Falco niger, Gmel. S. N. i. p. 259.

Falco americanus, Gmel. S. N. i. p. 257. Falco melanonotus, Lath. Ind. Orn. i. p. 16.

Aquila fulva, Meyer, Taschenb, Deuts, i. p. 14; Kaup, Classif. der Säug. und Vög. p. 121; Brehm, Vög. Deuts. i. p. 29; Schleg. Rev. Crit. des Ois. d' Eur. p. 6.

Falco regalis, Temm. Man. d.Orn. 1815, p. 10.

Aquila regia, Less. Tr. d'Orn. p. 36.

Aquila daphænia, Hodgs. Gray, Zool. Misc. (1844) p. 81.

Aquila melanaëtus, Brehm, Vog. Deuts. i. p. 20.

The golden Eagle, Bew. Brit. B. (1797) i. p. 5, fig.; Penn. Brit. Zool. (1812) i. p. 197; Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 4; Yarr. Brit. B. 2 edit. i. p. 11, fig.

The Ring-tailed Eagle, Bew. Brit. B. (1797) i. p. 7, fig.; Mont. Orn. Dict.

Black Eagle, Penn. Brit. Zool. (1812) i. p. 202.

Pl. enl. 409, 410; Brown, Illust. pl. 2; Gould, B. of Eur. pl. 6; Edwards's Birds, pl. 1.

a, b. Orkney. From Mr. Bullock's Museum.

c. Orkney. Young. From Mr. Bullock's Museum.

d, e. Chicks. From Mr. Bullock's Museum,

# 2. AQUILA NÆVIA. The rough-footed Eagle.

Aquila nævia, Meyer, Taschenb. Deuts. i. p. 19; Brehm, Vog. Deuts. i. p. 26; Kaup, Isis (1847) p. 249; Pr. Bonap. Geogr. Comp. List of B. p. 2; Keys. & Bl. Wirbelth. Eur. p. 30; Schleg. Rev. Crit. des Ois. d'Eur. p. 7; Dairs, Ann. & Mag. N. Hist. 1845, p. 351; G. R. Gray, Gen. of B. i. p. 13.

Falco nævius, Gmel. S. N. i. p. 258; Temm. Man. d'Orn. 1815, p. 14; Naum. Vög. Deuts. (1822) i. p. 217, t. 10, 11. Falco maculatus, Gmel. S. N. i. p. 258. Aquila pomarina, Brehm, Vög. Deuts. i. p. 27. Aquila planga, Vieill. Encyc. Meth. p. 1190. Aquila bifasciata, Hornsch. Aquila melanaëtos, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 84. Aquila clanga, Pall. Zooyr. i. p. 351. Aquila vittata, Hodgs. Gray, Zool. Misc. (1844) p. 81. Spizaëtus fuscus, Vieill. N. Dict. d'Hist. Nat. xxxii. p. 60. The Spotted Eagle, Yarr. Brit. B. 2 edit. i. p. 10,* fig.; Newm. Zool. 1846, p. 1208, fig.; Sav. Descr. d'Egypte, Hist. Nat. Ois. t. 1, et t. 2, f. 1; Gould, B. of Eur. pl. 8.

(Near Youghal, Ireland).

# 2. PANDION.

Pandion, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 95 (1809). Triorches, Leach, Syst. Cat. Mam. & B. B. M. p. 10 (1816). Balbusardus, Flem. Brit. An. p. 51 (1828). Ichthyaëtus, Lafr. Rev. Zool. (1839) p. 196. Polioa ëtus, Kaup, Isis (1847), p. 270.

#### a. Pandion.

# 1. Pandion Haliaetus. The Osprey.

Pandion haliaëtus, Cuv. Règ. An. (1817) i. p. 316; Kaup, Mus. Senckenb. (1845) p. 261; Macgill. Hist. Brit. B. iii. p. 239; Eyton, Cat. Brit. B. p. 2; Pr. Bonap. Geogr. Comp. List of B. p. 3; Keys. & Bl. Wirbelth. Eur. p. 29; Schleg. Rev. Crit. des Ois. d' Eur. p. 8; G. R. Gray, Gen. of B. i. p. 17. Falco haliaëtus, Linn. S. N. i. p. 129; Naum. Vög. Deuts. (1822) i. p. 241, t. 16. Aquila haliaëtus, Meyer, Taschenb. Deuts. i. p. 23; Jenyns, Man. B. Vert. An. p. 81. Pandion fluvialis, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 96. Aquila balbuzardus, Dum. Dict. des Sci. Nat. i. p. 351. Pandion ichthyaëtus, Kaup, Classif. der Säug. und Vög. p. 122. Pandion alticeps, Brehm, Vog. Deuts. i. p. 33. Pandion planiceps, Brehm, Vg. Deuts. i. p. 33, t. 2, f. 3. Accipiter haliaëtus, Pall. Zoogr. i. p. 355. Pandion indicus, Hodgs. Journ. A. S. B. (1837) p. 366.

Falco carolinensis, Gmel. S. N. i. p. 371. Falco cayanensis, Gmel. S. N. i. p. 164.

Falco arundinaceus, Gmel. S. N. i. p. 263.

Falco piscator, Briss. Orn. i. p. 361.

Aquila piscatrix, Vieill. Ois. de l'Amer. Septr. t. 4.

Pandion americanus, Vieill. Gal. des Ois. 1. 11; Swains. Class. of B. ii. p. 207.

Aquila (Pandion) halisëta, Rich. and Sw. Faun. Bor. Amer. ii. p.

20

Balbusardus haliætus, Flem. Brit. An. p. 51; Pl. enl. 414.

Triorches fluvialis, Leach, Syst. Cat. Mam. & Birds, B. M. p. 10.
The Osprey, Bew. Brit. B. (1797) i. p. 13; Mont. Orn. Dict.;
Penn. Brit. Zool. (1812) i. p. 214; Selby, Brit. Orn. i. p. 12.
The Osprey or Fishing Hawk, Yarr. Brit. B. 2 edit. i. p. 25, fig.

a. Devonshire. From Col. Montagu's collection.
b. Lincolnshire. Presented by the Hon. C. Pelham.

#### 3. HALIAËTUS.

Haliaëtus, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 85 (1809) Thalassoaëtus, Kaup, Classif. der Säug. und Vög. p. 123 (1844).

# 1. HALIAETUS ALBICILLA. The cinereous Eagle.

Haliaëtus albicilla, Leach, Syst. Cat. Mam. & B. B. M. p. 9; Kaup, Isis (1847), p. 275; Macgill. Hist. Brit. B. iii. p. 221; Brehm, Vög. Deuts. i. p. 14, t. iii. f. i.; Pr. Bonap. Geogr. Comp. List. of B. p. 3; Keys. & Bl. Wirbelth. Eur. p. 30; Schleg. Rev. Crit. des Ois. d'Eur. p. 8; G. R. Gray, Gen. of B. i. p. 17. Vultur albicilla, Linn. S. N. i. p. 123.

Falco ossifraga, Linn. S. N. i. p. 124. Falco melanaetos, Linn. S. N. i. p. 124. Aquila ossifraga, Pall. Zoogr. i. p. 348.

Falco albieaudus, Gmel. S. N. i. p. 258. Haliaëtus nisus, Sav. Descr. de l' Egypte, Hist. Nat. i. p. 86; Leach, Syst. Cat. Mam. & B. B. M. p. 9.

Falco hinnularius, Lath. Ind. Orn. i. p. 15.

Aquila albicilla, Pall. Zoogr. i. p. 345; Swains. Classif. of B. ii. p. 207; Flem. Brit. An. p. 53; Jenyns, Man. B. Vert. An. p. 80. Haliaëtus orientalis, Brehm, Vög. Deuts. i. p. 15.

Haliactus borealis, Brehm, Vög. Deuts. i. p. 15. Haliactus islandicus, Brehm, Vög. Deuts. i. p. 16.

Haliaëtus grænlandicus, Brehm, Vog. Deuts. i. p. 16.

Falco albicilla, Gmel. S. N. i. p. 253; Naum. Vög. Deuts. (1822) i. p. 224, t. 12, 13, 14.

Haliaëtus pygargus, Eyton, Cat. Brit. B. p. 3.

The White-tailed Eagle, Bew. Brit. B. (1797) i. p. 9, fig.; Yarr. Brit. B. 2 edit. i. p. 20, fig.

The Sea Eagle, Bew. Brit. B. (1797) i. p. 11, fig.; Mont. Orn.

Dict.; Penn. Brit. Zool. (1812) i. p. 305, pl. xvii.

Cinereous Eagle, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 209, pl. xviii.; Selby, Brit. Orn. i. p. 9.

Pl. enl. 112, 415; Gould, B. of Eur. pl. 10; Kittl. Kupf. Nat. der Vog. t. 2, f. 2.

a. Shropshire, &c. Female adult. From Mr. Bullock's Museum.

b. Shropshire. Young female.

c. Kent. Young male. From Col. Montagu's collection.
 d. Orkneys. Very young. From Mr. Bullock's Museum.

# ii. Buteoninæ.

#### 1. BUTEO.

Buteo, Cuv. Anat. Compar. i. Tab. Sec. Cl. des Ois. (1799—1800). Craxirex, Gould, Zool. Beagle, p. 22 (1838). Pæcilopternis, Kaup, Isis (1847), p. 329. Tachytriorchis, Kaup, Classif. der Säug. und Vög. p. 123 (1844). Gypsoictinia, Kaup, Mus. Senckenb. (1845) p. 261. Leucopternis, Kaup, Isis (1847) p. 210.

#### а. Витео.

#### 1. BUTEO VULGARIS. The common Buzzard.

Buteo vulgaris, Bechst. Taschenb. Deuts. i. p. 15; Leach, Syst. Cat. Mam. & B. B. M. p. 10; Kaup, Isis (1847), p. 338; Flem. Brit. An. p. 54; Pr. Bonap. Geogr. Comp. List. of B. p. 3; Keys. & Bl. Wirbelth. Eur. p. 30; Schleg. Rev. Crit. des Ois. d'Eur. p. 9; Jenyns, Man. B. Vert. An. p. 87; Eyton, Cat. Brit. B. p. 4; G. R. Gray, Gen. of B. i. p. 11.

Falco buteo, Linn. S. N. i. p. 127; Temm. Man. d'Orn. 1815, p. 20; Naum. Vög. Deuts. (1822) i. p. 346, t. 32, 33.

Falco glaucopis, Merr. Beitr. ii. t. 7.

Buteo mutans, Vieill. N. Dict. d'Hist. Nat. iv. p. 469; Faun. Franc. Ois. t. 8, f. 2.

Buteo fasciatus, Vieill. N. Dict. d'Hist. Nat. iv. p. 474; Faun. Franc. Ois. L. 8, f. 1.

Falco variegatus, Gmel. S. N. i. p. 267. Falco versicolor, Gmel. S. N. i. p. 272. Falco cinereus, Gmel. S. N. i. p. 267. Falco obsoletus, Gmel. S. N. i. p. 268. Buteo albus, Daud. Tr. d'Orn. ii. p. 155.

Accipiter buteo, Pall. Zoogr. i. p. 362.

Falco pogana, Savi, Orn. Tosc. iii. p. 197; Stor. deg. Ucc. t. 38.

Buteo septentrionalis, Brehm, Vog. Deuts. i. p. 42. Buteo medius, Brehm, Vög. Deuts. i. p. 43, t. 3, f. 3.

Buteo murum, Brehm, Vog. Deuts. i. p. 44.

Buteo vulgaris, japonicus, Temm. et Schl. Faun. Jap. t. 6?

Buteo fuscus, Macgill. Hist. Brit. B. iii. p. 183.

The Common Buzzard, Bew. Brit. B. (1797) i. p. 15, fig.; Mont. Orn. Diet.; Selby, Brit. Orn. i. p. 18; Yarr. Brit. B. 2 edit. i. p. 82, fig.

Buzzard, Penn. Brit. Zool. (1812) i. p. 232, pl. xxvii. Pl. enl. t. 419; Gould, B. of Eur. pl. 14.

a. Devoushire. Male.

b. Devonshire. Male. Presented by G. Leach, Esq.

c. Great Britain.

d. Devonshire. Chick. Presented by G. Leach, Esq. e. Sternum. England.

f. Sternum. England. Presented by John Ray, Esq.

# 2. ARCHIBUTEO.

Archibuteo, Brehm, Isis (1828), p. 1269. Triorchis, Kaup, Naturl. Syst. Eur. Thier. p. 84 (1829). Butaëtes, Less. Tr. d'Orn. p. 83 (1831). Butaquila, Hodgs. Gray's Zool. Misc. (1844) p. 81. Hemiaëtus, Hodgs. Gray's Zool. Misc. (1844) p. 81.

#### The rough-legged Falcon. 1. ARCHIBUTEO LAGOPUS.

Archibuteo lagopus, G. R. Gray, List Gen. of Birds, p. 3; Kaup, Classif, der Säug, und Vög. p. 123; G. R. Gray, Gen. of B. i. p. 12.

Falco layopus, Brun. Orn. Bor. p. 4; Temm. Man. d'Orn. 1815, p. 22; Naum. Vög. Deuts. (1822) i. p. 359, t. 34.

Falco plumipes, Daud. Tr. d'Orn. ii. p. 163. Falco sclavonicus, Lath. Ind. Orn. i. p. 26.

Falco pennatus, Cuv. Reg. An. (1817) i. p. 323. Archibuteo planiceps, Brehm, Vog. Deuts. i. p. 40. Archibuteo alticeps, Brehm, Vog. Deuts. i. p. 40, t. iv. f. 2.

Accipiter lagopus, Pall. Zoogr. i. p. 360, t. x.

Butaëtes buteo, Less. Tr. d'Orn. p. 83.

Butaëtes Lessonii, A. Smith.

Butaëtes lagopus, Pr. Bonap. Geogr. Comp. List of B. p. 3.

Buteo lagopus, Leach, Syst. Cat. Mam. & B. B. M. p. 10; Flem. Brit. An. p. 54; Jenyns, Man. B. Vert. An. p. 87; Macgill. Hist. Brit. B. iii. p. 193; Eyton, Cat. Brit. B. p. 4; Keys. & Bl. Wirbelth. Eur. p. 30; Schleg. Rev. Crit. des Ois. d'Eur. p. 9.

Triorchis lagopus, Kaup, Naturl. Syst. p. 84.

Rough-legged Falcon, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 228, pl. xxvi.; Selby, Brit. Orn. i. p. 20; Bew. Brit. B. (1826) i. p. 20.

Rough-legged Buzzard, Yarr. Brit. B. 2 edit. i. p. 87, fig. Levaill. Ois. d'Afr. t. 18; Gould, B. of Eur. pl. 15.

Norfolk. Female.

b. Kent. Female. Presented by Dr. Latham.

c. Great Britain.

d. Epping. Male. Presented by H. Doubleday, Esq. e. Epping. Female. Presented by H. Doubleday, Esq.

# iii. Milvinæ.

#### PERNIS.

Pernis, Cuv. Reg. An. (1817) i. p. 322.

# 1. Pernis apivorus. The honey Buzzard.

Pernis apivorus, Cuv. Reg. An. (1817) i. p. 323; Kaup, Classif. der Säug. und Vög. p. 123; Flem. Brit. An. p. 52; Macgill. Hist. Brit. B. iii. p. 254; Eyton, Cat. Brit. B. p. 4; Pr. Bonap. Geogr. Comp. List of B. p. 3; Keys. & Bl. Wirbelth. Eur. p. 29; Schleg. Rev. Crit. des Ois. d'Eur. p. 9; G. R. Gray's Gen. of B. i. p. 24.

Falco apivorus, Linn. S. N. i. p. 130; Temm. Man. d'Orn. 1815. p. 23; Naum. Vög. Deuts. (1822) i. p. 367, t. 36, 37.

Falco poliorhynchus, Bechst. Taschenb. Deuts. i. p. 19.

Falco dubius, Sparr. Mus. Carls. t. 26.

Falco incertus, Lath. Ind. Orn. i. p. 32.

Accipiter lacertarius, Pall. Zoogr. i. p. 359. Pernis apium, Brehm, Vög. Deuts. i. p. 46.

Pernis vesparum, Brehm, Vog. Deuts. i. p. 47, t. iv. f. 3.

Buteo apivorus, Vieill. N. Dict. d'Hist. Nat. iv. p. 479; Jenyns,

Man. B. Vert. An. p. 88.

The Honey Buzzard, Bew. Brit. B. (1797) i. p. 17; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 235; Selby, Brit. Orn. i. p. 22; Yarr. Brit. B. 2 edit. i. p. 91, fig.

Pl. enl. 420; Gould, B. of Eur. pl. 16; Jard. and Selby, Ill.

Orn. N. S. pl. 1.

a. Yorkshire. Female.
b. Great Britain. Male.

c. Cornwall, Male.

#### 2. MILVUS.

Milvus, Cuv. Anat. Comp. i. Tabl. Sec. Class. des Ois. (1799-1800). Hydroïctinia, Kaup, Classif. der Säug. und Vög. p. 115 (1844).

### a. MILVUS.

### 1. MILVUS REGALIS. The Kite.

Milvus regalis, Briss. Orn. i. p. 414, t. 33; Kaup, Classif. der Säugund Vög. p. 114; Brehm, Vög. Deuts. i. p. 49; Macgill. Hist. Brit. B. iii. p. 265; Eyton, Cat. Brit. B. p. 4; Pr. Bonap. Geogr. Comp. List of B. p. 4; Keys. & Bl. Wirbelth. Eur. p. 30; Schleg. Rev. Crit. des Ois. d'Eur. p. 10; G. R. Gray, Gen. of B. i. p. 24.

Falco milvus, Linn. S. N. i. p. 136; Temm. Man. d'Orn. 1815, p.

17; Naum. Vög. Deuts. (1822) i. p. 333, t. 31, f. 1.

Falco austriacus, Gmel. S. N. i. p. 262.

Accipiter korschun, S. G. Gmel. N. C. Petr. xv. p. 444, t. 11, a. Milvus ictinus, Savig. Descr. de l'Egypte, Hist. Nat. i. p. 88;

Leach, Syst. Cat. Mam. & B. B. M. p. 9; Jenyns, Man. B. Vert.

An. p. 86.

Milvus castaneus, Daud. Tr. d'Orn. ii. p. 146. Milvus russicus, Daud. Tr. d'Orn. ii. p. 188.

Milvus jaicensis, Lepech. Iter. ii. p. 180, t. 2. Accipiter regalis, Pall. Zoogr. i. p. 358.

Milvus vulgaris, Flem. Brit. An. p. 51.

Milvus ruber, Brehm, Vög. Deuts. i. p. 50. The Kite, Bew Brit. B. (1797) i. p. 21, fig.; Mont. Orn. Dict.;

Penn. Brit. Zool. (1812) i. p. 229; Yarr. Brit. B. 2 edit. i. p. 71, fig.

Kite or Glead, Selby, Brit. Orn. i. p. 15.

d. Cueramrthenshire. Male. From Col. Montagu's collection.
5. Sternum. England. Presented by John Ray, Esq.

#### 3. NAUCLERUS.

Nauclerus, Vigors, Zool. Journ. (1825) p. 386. Chelidopteryx, Kaup, Classif. der Säug. und Vög. p. 112 (1844).

#### a. NAUCLERUS.

#### 1. NAUCLEBUS FURCATUS. The swallow-tailed Falcon.

Elanoïdes furcatus, Vieill. Encyc. Méth. p. 1204. Elanoïdes yetapa, Vieill. Encyc. Méth. p. 1205.

Nauclerus furcatus, Vigors, Zool. Journ. (1825) p. 387; Kaup, Mus. Senckenb. (1845) p. 258; Pr. Bonap. Geogr. Comp. List of B. p. 4; Keys. & Bl. Wirbelth. Eur. p. 29; Schleg. Rev. Crit. des Ois. d'Eur. p. 11; Macgill. Hist. Brit. B. iii. p. 277; G. R. Gray, Gen. of B. i. p. 25.

Falco furcatus, Linn. S. N. i. p. 129; Flem. Brit. An. p. 52.

Milvus carolinensis, Briss. Orn. i. p. 418.

Milvus furcatus, Jenyns, Man. B. Vert. An. p. 86; Eyton, Cat. Brit. B. p. 66.

The Swallow-tailed Kite, Yarr. Brit. B. 2 edit. i. p. 77, fig.

Catesby, Car. t. 4; Wils. Amer. Orn. pl. 51, f. 3; Azara, No. 38; Gould, B. of Eur. pl. 30.

(Argyleshire and Yorkshire).

# iv. FALCONINÆ.

### 1. FALCO.

Falco, Linn. Syst. Nat. 1735. Hierofalco, Cuv. Reg. An. (1817) i. p. 312. Gyrfalco, Flem. Brit. An. p. 50 (1828). Rhynchodon, Nitszch. Pterylogr. p. 78 (1840). Gennaia, Kaup, Isis, 1847, p. 69.

# a. HIEROFALCO.

# 1. FALCO GYRFALCO. The Jerfalcon.

Falco (Hierofalco) candicans, Kaup, Classif. der Säug. und Vög. p. 110.
Falco (Hierofalco) gyrfalco, Kaup, Mus. Senckenb. (1845) p. 258.

Falco (Hierofalco) islandicus, Kaup, Isis (1847), p. 76.

Falco gyrfalco, Linn. S. N. i. p. 130; Pall. Zoogr. i. p. 324, t. 3; Macgill. Hist. Brit. B. iii, p. 284; Pr. Bonap. Geogr. Comp. List of B. p. 4; Keys. & Bl. Wirbelth, Eur. p. 28; G. R. Gray, Gen. of B. i. p. 19.

Falco islandicus, Brun. Faun. Grant. No. 8; Temm. Man. d'Orn.

1815, p. 33; Jenyns, Man. B. Vert. An. p. 81.

Falco sacer, Gmel. S. N. i. p. 275.

Buteo cinereus, Daud. Tr. d'Orn. ii. p. 156.

Falco fuseus, Brun. Faun. Grant, p. 50?

Falco candicans, Gmel. S. N. i. p. 275; Naum. Vog. Deuts. (1822) i. p. 269, t. 22, 21; Keys. & Bl. Wirbelth. Eur. p. 28; Schleg. Ren. Crit. des Ois. d'Eur. p. 1.

Falco grænlandicus, Hanc. Ann. Nat. Hist. (1839) p. 249.

Hierofalco candicaus, Cuv. Reg. An. (1817) p. 312. Hierofalco islandicus, Brehm, Vog. Deuts. i. p. 55.

Hierofalco grænlandicus, Brehm, Vog. Deuts. i. p. 56, t. v. f. 1.

Gyrfalco candicans, Flem. Brit. An. p. 50.

Hierofalco gyrfalco, Eyton, Cat. Brit. B. p. 2. The Jerfalcon, Bew. Brit. B. (1797) i. p. 29; Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 36; Bew. Brit. B. (1826) i. p. 15.

The Gyrfalcon, Penn. Brit. Zool. (1812) i. p. 217, pl. xix.; Yarr. Brit. B. 2 edit. i. p. 31, fig.

Pl. enl. 210, 446; Gould, B. of Eur. pl.

a. Iceland. From Mr. Leadbeater's collection.

b. Iceland. Young. From Mr. Leadbeater's collection.

c. Great Britain?

# b. FALCO.

# 2. FALCO PEREGRINUS. The peregrine Falcon.

Falco peregrinus, Gmel. S. N. i. p. 272; Temm. Man. d'Orn. 1815, p. 34; Leach, Syst. Cat. Mam. & B. B. M. p. 11; Kaup, Classif. der Säug. und Vög. p. 110; Brehm, Vög. Deuts. i. p. 63; Flem. Brit. An. p. 49; Jerd. Madr. Journ. Lit. and Sci. (1839) p. 79; Pall. Zool. i. p. 327, t. 3, 4; Jenyns, Man. B. Vert. An. p. 82; Naum. Vog. Deuts. (1822) i. p. 285, t. 24, 25; Macgill. Hist. Brit. B. iii. p. 294; Eyton, Cat. Brit. B. p. 1; Pr. Bonap. Geogr. Comp. List of B. p. 4; Keys. & Bl. Wirbelth. Eur. p. 28; G. R. Gray, Gen. of B. i. p. 19.

Falco abietinus, Bechst. Naturg. Deuts. ii. p. 759.

Falco barbarus, Linn. S. N. i. p. 125.

Falco communis, Briss. Orn. i. p. 321; Schleg. Rev. Crit. des Ois. d'Eur. p. 2.

Falco orientalis, Gmel. S. N. i. p. 264; Ellis, Icon. Ined. 7. Falco punicus, Levaill. Explor. Sci. de l'Algerie, Ois. t. 1. Falco peregrinus, Hodgs. Gray, Zool. Misc. (1844) p. 81.

Falco micrurus, Hodgs. Gray, Zool. Misc. (1844) p. 81. Falco calidus, Lath. Ind. Orn. i. p. 41.

Falco cornicum, Brehm, Vög. Deuts. i. p. 62, t. v. f. 2.

The Lanner, Penn. Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 223, pl. xxiii.

The Peregrine Falcon, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 218, pl. xx.; Selby, Brit. Orn. i. p. 37; Yarr. Brit. B. 2 edit. i. p. 37, fig.

Pl. enl. 430; Gould, B. of Eur. pl. 21.

- a, b. Devonshire. Male. From Col. Montagu's collection.
- c, d. Devonshire. Female. From Col. Montagu's collection.
- e. Bickham, Devon. Male.
- f. Great Britain. Female.
- g. Sternum. England.
- h. Sternum. England. Presented by T. Ingall, Esq.
- i. Sternum. England. Presented by John Ray, Esq.

#### 2. HYPOTRIORCHIS.

Hypotriorchis, Boie, Isis (1826), p. 976. Æsalon, Kaup, Naturl. Syst. (1829) p. 40. Dendrofalco, G. R. Gray, List of Gen. of B. (1840) p. 3.

# a. Hypotriorchis.

### 1. HYPOTRIORCHIS SUBBUTEO. The Hobby.

Hypotriorchis subbuteo, Boie, Isis (1826), p. 976; Kaup, Naturl. Syst. p. 34; G. R. Gray, Gen. of B. i. p. 20.

Falco subbuteo, Linn. S. N. i. p. 127; Temm. Man. d'Orn. 1815, p. 37; Frankl. Proc. Z. S. (1831) p. 114; Brehm, Vög. Deuts. i. p. 64, 65; Flem. Brit. An. p. 49; Jenyns, Man. B. Vert. An. p. 82; Naum. Vög. Deuts. (1822) i. p. 296, t. 26; Macgill. Hist. Brit. B. iii. p. 309; Eyton, Cat. Brit. B. p. 2; Pr. Bonap. Geogr. Comp. List of B. p. 4; Keys. & Bl. Wirbelth. Eur. p. 28; Schleg. Rev. Crit. des Ois. d'Eur. p. 3.

Falco barletta, Daud. Tr. d'Orn. ii. p. 129.

Falco subbuteo major, Lath. Ind. Orn. Suppl. p. x.

Falco pinetarius, Shaw, Gen. Zool. vii. p. 195? Falco hirondinum, Brehm, Vög. Deuts. î. p. 65.

Falco (Hypotriorchis) subbuteo, Kaup, Classif. der Säug. und Vög. p. 111.

The Hobby, Bew. Brit. B. (1797) i. p. 39; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 247; Selby, Brit. Orn. i. p. 41; Yarr. Brit. B. 2 edit. i. p. 45, fig.

Pl. enl. 432; Gould, B. of Eur. pl. 22.

a. Devonshire. Male. From Col. Montagu's collection.

b. Young male. Presented by J. Scales, Esq.

e. Chicks. England. Presented by Mr. J. Baker.

- d. Turnham Green. Young male. From Mr. J. Baker's collec-
- e. Turnham Green. Female. From Mr. J. Baker's collection.
- f. Sternum. England. Presented by John Ray, Esq. g. Skull. England. Presented by John Ray, Esq.

# b. ÆSALON.

### 2. Hypotriorchis Esalon. The Merlin.

Hypotriorchis esalon, Boie, Isis, 1828, p. 314; G. R. Gray, Gen. of B. i. p. 20.

Falco æsalon, Gmel. S. N. i. p. 284; Temm. Man. d'Orn. 1815, p. 38; Flem. Brit. An. p. 50; Jenyns, Man. B. Vert. An. p. 83; Brehm, Vög. Deuts. i. p. 68; Pall. Zoogr. i. p. 336, t. 7; Naum. Vög. Deuts. (1822) i. p. 303, t. 27; Macgill. Hist. Brit. B. iii. p. 317; Eyton, Cat. Brit. B. p. 2; Pr. Bonap. Geogr. Comp. List of B. p. 4; Keys. & Bl. Wirbelth. Eur. p. 3; Schleg. Rev. Crit. des Ois. d'Eur. p. 3;

Falco cæsius, Meyer, Taschenb. Deuts. i. p. 60.

Falco lithofalco, Gmel. S. N. i. p. 278; Brehm, Vog. Deuts. i. p. 67.

Falco regulus, Pall. Iter. ii. p. 707.

Falco sibiricus, Shaw, Gen. Zool. vii. p. 207.

Falco smirillus, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 100; Leach, Syst. Cat. Mam. & B. B. M. p. 10.

Esalon lithofalco, Kaup, Naturl. Syst. (1829) p. 40.

Falco (Æsalon) lithofalco, Kaup, Mus. Senckenb. (1845) p. 258. The Merlin, Bew. Brit. B. (1797) i. p. 41, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 251; Selby, Brit. Orn. i. p. 45;

Yarr. Brit. B. 2 edit. i. p. 53, fig.

Stone Falcon, Mont. Orn. Dict. App. to Suppl. Pl. enl. 447; Gould, B. of Eur. pl. 24.

a. Devonshire. Male. From Col. Montagu's collection.

Somersetshire. Young female. From Col. Montagu's collection.

c. Sternum. England.

d. Sternum. England. Presented by T. Ingall, Esq.

e. Sternum. England. Presented by John Ray, Esq.

#### 3. TINNUNCULUS.

Tinnunculus, Vieill. Ois. de l'Amér. Sept. i. p. 39 (1807). Cerchneis, Boie, Isis (1826), p. 976.

Egypius, Kaup, Naturl. Syst. p. 20 (1829).

Falcula, Hodgs. Journ. A. S. B. (1837) p. 365.

Erythropus, Brehm, Isis (1828), p. 1270.

Pannychistes, Kaup, Naturl. Syst. der Eur. Thier. p. 57 (1829).

Pœcilornis, Kaup, Classif. der Säug. und Vög. p. 108 (1844).

Tichornis, Kaup, Classif. der Säug. und Vög. p. 108 (1844).

#### a. Tinnunculus.

# J. TINNUNCULUS ALAUDARIUS. The Kestril.

Tinnunculus alaudarius, G. R. Gray, List. Gen. of B. (1840) p. 3; Kaup, Mus. Senckenb. (1845) p. 257; G. R. Gray, Gen. of B. i.

p. 21.

Falco tinnunculus, Linn. S. N. i. p. 127; Temm. Man. d'Orn. 1815, p. 39; Leach, Syst. Cat. Mam. & B. B. M. p. 10; Frankl. Proc. Z. S. (1831) p. 114; Flem. Brit. An. p. 50; Jenyns, Man. B. Vert. An. p. 84; Naum. Vög. Deuts. (1822) i. p. 523, t. 30; Macgill. Hist. Brit. B. iii. p. 325; Eyton, Cat. Brit. B. p. 2; Keys. & Bl. Wirbelth. Eur. p. 29; Schleg. Rev. Crit. des Ois. d'Eur. p. 4.

Accipiter alaudarius, Briss. Orn. i. p. 379.

Falco brunneus, Bechst. Naturg. Deuts. i. p. 38.

Cerchneis tinnuncula, Boie, Isis (1828), p. 314; Pr. Bonap. Geogr. Comp. List. of B. p. 5.

Falco fasciatus, Retz. Faun. Suec. p. 70.

Falco rufescens, Swains. B. of W. Afr. i. p. 109.

Falco interstinctus, M'Clell. Proc. Zool. Soc. (1839) p. 154. Falco tinuunculus, japonicus, Temm. et Schl. Faun. Jap. t.

Cerchneis murum, Brehm, Vog. Deuts. i. p. 70.

Cerchneis media, Brehm, Vig. Deuts. i. p. 72. Cerchneis tinnuncula, Brehm, Vog. Deuts. i. p. 73.

Ægypius tinnunculus, Kaup, Naturl. Syst. p. 29.

The Kestrel, Bew. Brit. B. (1797) i. p. 36, 37, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 244; Selby, Brit. Orn. i. p. 43.

The Kestril or Windhover, Yarr. Brit. B. 2 edit. i. p. 57, fig. Pl. enl. 401, 471; Gould, B. of Eur. pl. 26.

a. Devonshire. Male. From Col. Montagu's collection.

Male. From Col. Montagu's collection. b. Wiltshire. c. Wiltshire. Female. From Col. Montagu's collection.

- d. Great Britain. Female. Presented by A. Cooper, Esq., R.A. e. Cambridgeshire. Male. From Mr. J. Clark's collection.
- f. Cambridgeshire. Female. From Mr. J. Clark's collection. g, h. Nest and chicks. England. Presented by Maj. Gen. T.

Hardwicke.

i. Chick. From Mr. Bullock's collection.

j. Sternum. England. Presented by T. Ingall, Esq. k. Sternum. England. Presented by John Ray, Esq.

# b. ERYTHROPUS.

# 2. TINNUNCULUS VESPERTINUS. The Red-footed Falcon.

Tinnunculus vespertinus, G. R. Gray, Gen. of B. i. p. 21; Cat. Mam. and Birds of Nepal, &c., p. 45; G. R. Gray, Gen. of B.

Falco vespertinus, Linn. S. N. i. p. 129; Pall. Zoogr. i. p. 334, t.
6; Maegill. Hist. Brit. B. iii. p. 313; Pr. Bonap. Geogr. Comp. List of B. p. 4; Keys. & Bl. Wirbelth. Eur. p. 29.

Falco rufipes, Beseke, Vög. Kurlands, p. 13, 1. 3, 4; Temm. Man. d'Orn. 1815, p. 41; Jenyns, Man. Vert. An. p. 83; Naum. Vög. Deuts. (1822) i. p. 311, t. 28; Eyton, Cat. Brit. B. p. 2; Schleg. Rev. Crit. des Ois. d'Eur. p. 4.

Cerchneis vespertinus, Boie, Isis (1828), p. 314. Erythropus vespertinus, Brehm, Vog. Deuts. i. p. Pannychistes rufipes, Kaup, Naturl. Syst. p. 57.

Tinnunculus (Erythropus) rufipes, Kaup, Classif. der Säng. und Vog. p. 108.

Tinnunculus (Erythropus) vespertinus, Kaup, Mus. Senckenb. (1845) p. 257.

The Red-legged Falcon, Eyton, Hist. R. Brit. B. p. 5, fig. The Red-footed Falcon, Yarr. Brit. B. 2 edit. i. p. 49, fig.

Pl. enl. 431; Pall. Zoogr. t. 6; Kittl. Kupf. der Vög. t. 3, f. 1; Gould, B. of Eur. pl. 23.

(Norfolk, &c., and county of Wicklow).

#### v. Accipitrinæ.

#### 1. ASTUR.

Astur, Lacep. Mém. de l'Inst. iii. p. 506 (1800—1801).
Dædalion, Sav. Descr. de l'Egypte, Hist. Nat. p. 92 (1809).
Sparvius, Vieill. Analyse, &c., p. 24 (1816).
Leucospiza, Kaup, Classif. der Säug. und Vög. p. 118 (1844).
Lophospiza. Kaup, Classif. der Säug. und Vög. p. 118 (1844).
Asturina, Vieill. Analyse, &c., p. 24 (1816).
Rupornis, Kaup, Classif. der Säug. und Vög. p. 120 (1844).

#### a. Astur.

# 1. ASTUR PALUMBARIUS. The Goshawk.

Astur palumbarius, Bechst. Taschenb. Deuts. ii. p. 268; Brehm, Vög. Deuts. i. p. 84, t. 6, f. 1; Eyton, Cat. Brit. B. p. 3; Pr. Bonap. Geogr. Comp. List of B. p. 5; Keys. & Bl. Wirbelth. Eur. p. 31; Schleg. Rev. Crit. des Ois. d'Eur. p. 4; G. R. Gray, Gen. of B. i. p. 27.

Falco palumbarius, Linn. S. N. i. p. 130; Pl. enl. 418; Temm. Man. d'Orn. 1815, p. 29; Naum, Vög. Deuts. (1822) i. p. 250, t. 17, 18.

Buteo palumbarius, Flem. Brit. An. p. 54.

Accipiter palumbarius, Jenyns, Man. B. Vert. An. p. 85; Macgill. Hist. Brit. B. iii. p. 340.

Falco gallinarius, Gmel. S. N. i. p. 266; Pl. enl. 461, 423.

Falco gentilis, Linn. S. N. i. p. 126.

Falco albescens, Bodd. Tabl. Pl. Enl. de D'Aub. p. 25.

Accipiter astur, Pall. Zoogr. t. 11.

Astur gallinarum, Brehm, Vög. Deuts. i. p. 83.

The Goshawk, Bew. Brit. B. (1797) i. p. 23, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 225, pl. xxiv.; Selby, Brit. Orn. i. p. 31; Yarr. Brit. B. 2 edit. i. p. 62, fig.

Gentil Falcon, Bew. Brit. B. (1797) i. p. 30; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 222, pl. xxi. xxii.

Gould, B. of Eur. pl. 17; Jard. and Selby, Ill. Orn. pl. 121.

a. Great Britain. Young.

#### 2. ACCIPITER.

Accipiter, Briss. Orn. i. p. 310 (1760).
Nisus, Cuv. Anat. Compar. i. Tab. Sec. Cl. des Ois. (1799—1800).
Ierax, Leach, Syst. Cat. Mam. & Birds, p. 10 (1816).
Hieraspiza, Kaup, Classif, der Säug. und Vög. p. 116 (1844).
Urospiza, Kaup, Mus. Senckenb. (1845) d. 259.

### a. ACCIPITER.

# 1. Accipiter NISUS. The Sparrow-Hawk.

Accipiter nisus, Pall. Zoogr. i. p. 370; Macgill. Hist. Brit. B. iii. p. 346; Pr. Bonap. Geogr. Comp. List of B. p. 5; G. R. Gray, Gen. of B. i. p. 29.

Falco nisus, Linu. S. N. i. p. 130; Temm. Man. d'Orn. 1815, p.

31; Naum. Vög. Deuts. (1822) i. p. 258, t. 19, 20. Accipiter fringillarius, Ray, Syn. p. 18; Jenyns, Man. B. Vert. An. p. 85; Eyton, Cat. Brit. B. p. 3.

Nisus communis, Cuv. Less. Tr. d'Orn. p. 53. Accipiter maculatus, Briss. Orn. i. p. 314.

Falco lacteus, Gmel. S. N. i. p. 281.

Nisus elegans, Brehm, Vög. Deuts. i. p. 86, t. 6, f. 2.

Nisus fringillarum, Brehm, Vög. Deuts. i. p. 87. Nisus peregrinus, Brehm, Vög. Deuts. i. p. 88.

Sparvius nisus, Vieill. N. Dict. d'Hist. Nat. x. p. 319.

Nisus fringillarius, Kaup, Classif. der Säng. und Vög. p. 117. Accipiter nisosimilis, Tick. Journ. A. S. B. (1833) p. 571.

Accipiter subtypieus, Hodgs. Gray, Zool. Misc. (1844) p. 81. Ietax fringillarius, Leach, Syst. Cat. Mam. & B. B. M. p. 10.

Buteo nisus, Flem. Brit. An. p. 55.

Astur nisus, Keys. & Bl. Wirbelth. Eur. p. 31; Schley. Rev. Crit. des Ois. d'Eur. p. 5.

The Sparrowhawk, Bew. Brit. B. (1797) i. p. 27, fig.; Mont. Orn. Diet.; Penn. Brit. Zool. (1812) i. p. 249; Selby. Brit. Orn. i. p. 33; Yarr. Brit. B. 2 edit. i. p. 67, fig.

Pl. enl. 467, 412; Gould, B. of Eur. pl. 18.

- a. Wiltshire. Male. From Col. Montagu's collection.
- b. Wiltshire. Female. From Col. Montagu's collection.
- c. Great Britain. Male. Presented by A. Cooper, Esq., R.A.
- d. Saffron Walden. Male. From Mr. J. Clarke's collection.
- e. Cambridgeshire. Young. Presented by Mr. J. Baker.
- f. Saffron Walden. Female. From Mr. J. Clarke's collection.
- g. Cambridgeshire. Female. From Mr. J. Baker's collection.
- h. Cornwall. Presented by D. W. Mitchell, Esq.
- i. Sternum. England. Male. Presented by T. Ingall, Esq.
- j. Sternum. England. Female. Presented by T. Ingall, Esq.
- k. Sternum. England.
- l. Sternum. England. Presented by John Ray, Esq.

#### vi. CIRCINÆ.

#### 1. CIRCUS.

Circus, Lacep. Mem. d'Inst. iii. p. 506 (1800—1801).
Pygargus, Koch, Syst. der Baier. Zool. p. (1816).
Strigiceps, Bonap. (1831) Sagg. Distr. Meth. Anim. Vert. p. 37.
Busarellus, Lafr. Rev. Zool. (1839).
Glaucopteryx, Kaup, Classif. der Säug. und Vög. p. 113 (1844).
Spilocircus, Kaup, Isis (1847), p. 101.
Spizacircus, Kaup, Mus. Senckenb. (1845) p. 258.

#### a. STRIGICEPS.

#### 1. CIRCUS CYANEUS. The Hen Harrier.

Circus cyaneus, Boie, Isis (1822), p. 549; Flem. Brit. An. p. 53; Macgill. Hist. Brit. B. iii. p. 366; Keys. and Bl. Wirbelth. Eur. p. 31; Schleg. Rev. Crit. des Ois. d'Eur. p. 6; G. R. Gray, Gen. of B. i. p. 32.

Falco cyaneus, Linn. S. N. i. p. 126; Temm. Man. d'Orn. 1815, p. 26.

Circus Ægithus, Leach, Syst. Cat. Mam. & B. B. M. p. 9.
Falco pygargus, Linn. S. N. i. p. 126; Naum. Vög. Deuts. (1822)
i. p. 391, t. 38, 39.

Accipiter variabilis, Pall. Zoogr. i. p. 364. Falco bohemicus, Gmel. S. N. i. p. 279. Falco albicans, Gmel. S. N. i. p. 276. Falco griseus, Gmel. S. N. i. p. 276. Falco montanus, Gmel. S. N. i. p. 276.

Falco cinereus, It. Poseg. p. 29.

Falco rubiginosus, It. Poseg. p. 29.

Circus gallinarius, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 92.

Falco strigiceps, Nils. Faun. Suec. i. p. 21.

Pygargus dispar, Koch, Syst. der Baier. Zool, p.

Circus pygargus, Cuv. Rég. An. (1817) i. p. 324; Eyton, Cat. Brit. B. p. 5.

Strigiceps pygargus, Pr. Bonap. Geogr. Comp. List of B. p. 5. Circus (Strigiceps) cyaneus, Bonap. Kaup, Mus. Senchenb. (1845)

p. 258; Edw. Birds, pl. 225.

Falco hudsonius, Linn. S. N. i. p. 128; Edw. Birds, pl. 107. Circus hudsonius, Vieill. Ois. de l'Amér. Sept. i. p. 36, t. 9.

Falco uliginosus, Gmel. S. N. i. p. 278; Edw. Birds, pl. 291. Circus uliginosus, Vieill. Ois. de l'Amér. Sept. i. p. 37.

Circus (Strigiceps) uliginosus, Kaup, Mus. Senckenb. (1845) p. 258.

Falco variegatus, Gmel. S. N. i. p. 276. Falco albidus, Gmel. S. N. i. p. 276.

Circus variegatus, Vieill. Ois, de l'Amér. Sept. i. p. 37.

Falco Buffonii, Gmel. S. N. i. p. 277.

Falco europogistus, Bosc, Daud. Tr. d'Orn. ii. p. 110; Vieill. Ois. de l'Amér. Sept. t. 8.

Buteo (Circus) eyaneus? var.? americanus, Sw. and Rich. Faun.

Bateo evaneus, Jenyns, Man. B. Vert. An. p. 89.

The Hen Harrier, Bew. Brit. B. (1812) i. p. 33, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 239, pl. xxix.; Selby, Brit. Orn. i. p. 26; Yarr. Brit. B. 2 edit. i. p. 101, fig.

The Ring-tail, Bew. Brit. B. (1797) i. p. 35, fig.; Penn. Brit.

Zool. (1812) i. p. 240.

Edwards' Birds, pl. 8.

a. Devoushire. Male. From Col. Montagu's collection.

b. Great Britain. Male.

c. Norfolk. Young female. Presented by J. Scales, Esq.

d. Great Britain. Young female. From Col. Montagu's collection.

e. Devonshire. Young female. From Col. Montagu's collection.

f. Great Britain. Young female. Presented by Sir A. Moles-worth.

q, h. Sterna. Eugland.

i. Sternum. England. Presented by John Ray, Esq.

#### b. Glaucopteryx.

#### 2. CIRCUS CINERACEUS. The Ash-coloured Falcon.

Falco cineraceus, Mont. Orn. Dict.

Falco cinerarius, Mont. Trans. Linn. ix. p. 188; Eyton, Cat. Brit. B. p. 5; Selby, Brit. Orn. i. p. 28.

Circus cinerarius, Leach, Syst. Cat. Mam. and B. B. M. p. 9.

Circus cineraceus, Naum. Vog. Deuts. (1822) i. p. 402, t. 40; Macgill. Hist. Brit. B. iii. p. 378; Pr. Bonap. Geogr. Comp. List of B. p. 5; Keys. and Bl. Wirbelth. Eur. p. 31; Schleg. Rev. Crit. des Ois. d'Eur. p. 6; G. R. Gray, Gen. of B. i. p. 32.

Circus Montagui, Vieill. N. Dict. d'Hist. Nat. xxxi. p. 411; Yarr.

Brit. B. 2 edit. i. p. 107.

Buteo cineraceus, Flem. Brit. An. p. 55; Jenyns, Man. B. Vert. A. p. 90.

Circus (Glaucopteryx) cineraceus, Kaup, Classif. der Säug. und Vög. p. 113.

Ash-coloured Falcon, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 243.

Ash-coloured Harrier, Selby, Brit. Orn. i. p. 28.

Montagu's Harrier, Yarr. Brit. B. 2 edit. i. p. 107, fig.

- a. Devonshire. Male. From Col. Montagu's collection.
- Male. From Col. Montagu's collection. b. Wiltshire.
- c. Oxfordshire. Male. d. Ashburton, Devon. Male. From Col. Montagu's collection.

e. — ? Female.

### c. Pygargus.

#### 3. CIRCUS ERUGINOSUS. The Moor Buzzard.

Circus æruginosus, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 90; Leach, Syst. Cat. Mam. and B. B. M. p. 9; Kaup, Mus. Senckenb. (1845) p. 258; Macgill. Hist. Brit. B. iii. p. 382; Pr. Bonap. Geogr. Comp. List of B. p. 5; Keys. and Bl. Wirbelth. Eur. p. 31; G. R. Gray, Gen. of B. i. p. 32.

Falco æruginosus, Linn. S. N. i. 130.

Circus palustris, Briss. Orn. i. p. 401. Circus variegatus, Sykes, Proc. Z. S. (1832) p. 81.

Falco rufus, Gmel. S. N. i. p. 266; Temm. Man. d'Orn. 1815, p. 24; Naum. Vög. Deuts. (1822) i. p. 378, t. 37, 38.

Circus rufus, Briss, Orn. i. p. 404; Sav. Descr. de l'Egypte, Hist. Nat. i. p. 91; Eyton, Cat. Brit. B. p. 5; Schleg. Rev. Crit. des Ois. d'Eur. p. 5.

Falco arundinaceus, Bechst.

Falco Krameri, Kram.

Circus rufus, var. indicus, Less. Compl. Buff. vii. p. 155.

Circus Sykesi, Less. Compt. Buff. vii. p. 161.

Buteo æruginosus, Flem. Brit. Anim. p. 55.

Accipiter circus, Pall. Zoogr. i. p. 362.

Pygargus rufus, Koch, Syst. der Baier. Zool. p.; Kaup, Classif. der Säug. und Vög. p. 113.

Buteo rufus, Jenyns, Man. B. Vert. An. 88.

Moor Buzzard, Bew. Brit. B. (1797) i. p. 19, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 237, pl. xxviii.

Marsh Harrier, Selby, Brit. Orn. i. p. 24; Yarr. Brit. B. 2 edit. i. p. 97, fig.

Pl. enl. 460, 424.

a. Carmarthenshire. Female. From Col. Montagu's collection.

b. Great Britain. Male.

c. Sternum. England.
d. Sternum. England. Presented by John Ray, Esq.
e. Skull. England. Presented by John Ray, Esq.

# SUB-ORDER 2. ACCIPITRES NOCTURNI.

Accipitres nocturni, Vieill. (1816); Cuv. (1817). Nyeteriens, Cuv. (1799—1800). Ægolii, Vieill. (1816). Notturni, Ranz. (1823).

#### FAM. III. STRIGIDÆ.

#### i. Surninæ.

#### 1. SURNIA.

Surnia, Dum. Zool. Anal. p. 34 (1806).

#### 1. SURNIA ULULA. The Hawk Owl.

Surnia ulula, Bonap.; G. R. Gray, Gen. of B. i. p. 33.

Strix ulula, Linn. S. N. i. p. 133.

Strix funerea, Linn. S. N. i. p. 133; Temm. Man. d'Orn. 1815, p. 57; Schleg. Rev. Crit. des Ois. d'Eur. p. 17.

Strix doliata, Pall. Zoogr. i. p. 316, t. 1.

Strix canadensis, Briss. Orn. i. p. 518, t. 37, f. 2.

Strix freti hudsonis, Briss. Orn. i. 520.

Strix hudsonia, Gmel. S. N. i. p. 295. Strix nisoria, Meyer, Taschenb. Deuts. i. p. 84; Naum. Vög. Deuts. (1822) i. p. 427, t. 42, f. 2.

Strix arctica, Sparr. Mus. Carl. 51.

Noctua (Surnia) funerea, Cuv. Reg. An. (1817) i. p. 332; Jenyns, Man. B. Vert. An. p. 526.

Surnia funerea, Brehm, Vög. Deuts. i. p. 101; Proc. Zool. Soc. (1835) p. 77; Pr. Bonap. Geogr. Comp. List of B. p. 6; Keys. and Bl. Wirbelth. Eur. p. 32.

Surnia borealis, Less. Tr. d'Orn. p. 100.

Surnia nisoria, Brehm, Vog. Deuts. i. p. 102, t. 7, f. 1.

Syrnium nisoria, Kaup, Naturl. Syst. der Eur. Thier. p. 59.

Syrnia funerea, Macgill. Hist. Brit. B. iii. p. 404. The Hawk Owl, Yarr. Brit. B. 2 edit. i. p. 146, fig.

Pl. enl. 463; Edwards' Birds, pl. 62; Gould, B. of Eur. pl. 45. (At sea, off Cornwall).

#### 2. NYCTEA.

Nyctea, Steph. Gen. Zool. xiii. p. 62 (1825).

# 1. NYCTEA NIVEA. The snowy Owl.

Nyctea nivea, Bonap.; G. R. Gray, Gen. of B. i. p. 34.

Strix nyctea, Linn. S. N. i. p. 132; Temm. Man. d'Orn. 1815, p. 48; Flem. Brit. An. p. 58; Naum. Vög. Deuts. (1822), i. p. 417, t. 41; Schleg. Rev. Crit. des Ois. d'Eur. p. 17.

Strix nivea, Daud. Tr. d'Orn. ii. p. 190,

Strix candida, Lath. Ind. Suppl. p. xiv.

Strix erminea, Shaw, Gen. Zool. vii. p. 251.

Nyctea erminea, Steph. Gen. Zool. xiii. p. 63.

Nyctia candida, Swains. Classif. of B. ii p. 217; Pr. Bonap. Geogr. Comp. List of B. p. 6.

Noctua nyctea, Cun. Rég. An. (1817), i. p. 332; Brehm, Vög. Deuts. i. p. 103, t. 7, f. 2; Jenyns, Man. B. Vert. An. p. 23.

Surnia nyctea, Selby, Ornith. i. p. 95; Eyton, Cat. Brit. B. p. 6; Keys, & Bl. Wirbelth. Eur. p. 33,

Syrnium nyctea, Kaup, Naturl. Syst. der Eur. Thier. p. 59.

Syrnia nyctea, Macgill. Hist. Brit. B. iii. p. 407.

Snowy Owl, Mont. Orn. Dict. Suppl. App.; Selby, Brit. Orn. 1.

Pl. enl. 458; Edwards' Birds, pl. 61; Levaill. Ois. d'Afr. t. 45; Gould, B. of Eur. pl. 43.

". Unst, Shetland Islands. From Mr. Bullock's collection.

### 3. ATHENE.

Noctua, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 105 (1809). Athene, Boie, Isis (1822), p. 549. Carine, Kaup. Naturl. Syst. der Eur. Thier. p. 29 (1829). Nyetipetes, Swains. Classif. of B. ii. p. 218 (1837). Glaucidium, Boie, Isis (1826), p. 976 (1837). Ninox, Hodgs. Journ. A. S. B. (1837), p. 364. Ciccaba, Wagl. Isis (1832), p. 1222.

#### a. ATHENE.

#### 1. ATHENE NOCTUA. The Little Owl.

Athene noctua, Boie, Isis (1826), p. 315; Pr. Bonap. Geogr. Comp.
List of B. p. 6; G. R. Gray, Gen. of B. i. p. 34.
Strix noctua, Retz. Fram. Succ. p. 85. Norm Via Deuts i. p.

Strix noctua, Retz. Faun. Suec. p. 85; Naum. Vög. Deuts. i. p. 493, t. 48, f. 1; Schleg. Rev. Crit. des Ois. d'Eur. p. 15.

Strix passerina, Lath. Ind. Orn. i. p. 65; Temm. Man. d'Orn. 1815, p. 53; Flem. Brit. An. p. 58.

Noctua passerina, Cuv. Reg. An. (1817), i. p. 332 (1829), p. 345; Jenyns, Man. B. Vert. An. p. 94; Eyton, Cat. Brit. B. p. 7.

Noctua glaux, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 105. Strix nudipes et S. psilodactyla, Nils. Orn. Suec. i. p. 68, t. 2;

Temm. Man. d'Orn. iii. p. 50. Athene psilodactyla, Brehm, Vög. Deuts. i. p. 110, t. 8, f. 2.

Noctua veterum, Licht.

Athene passerina, Boie, Isis (1822), p. 549; Brehm, Vög. Deuts. i. p. 110.

Athene gymnopus, Hodgs.

Carine passerina, Kaup, Naturl. Syst. p. 29.

Syrnia psilodactyla, Macgill. Hist. Brit. B. iii. p. 417.

Surnia noctua, Keys. & Bl. Wirbelth. Eur. p. 32.

The Little Owl, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 270; Selby, Brit. Orn. i. p. 64; Yarr. Brit. B. 2 edit. i. p. 149. Pl. enl. 439; Gould, B. of Eur. pl. 48; Edwards, Birds, pl. 228.

a. Great Britain. From Mr. Gould's collection.

#### 4. NYCTALE.

Nyctale, Brehm, Isis (1828), p. 1271. Ægolius, Kaup, Naturl. Syst. der Eur. Thier. p. 34 (1829). Scotophilus, Swains. Classif. of B. ii. p. 217 (1837).

# 1. NYCTALE FUNEREA. Tenginalm's Owl.

Nyctale funerea, Pr. Bonap.

Nyctale Tengmalmi, Pr. Bonap. Geogr. Comp. List of B. Eur. and N. Amer. p. 7; Keys. & Bl. Wirbelth. Eur. p. 32; G. R. Gray, Gen. of B. i. p. 40.

Strix funerea, Linn. Faun. Suec. p. 25. Strix passerina, Pall. Zoogr. i. p. 323.

Strix Tengmalmi, Gmel. S. N. i. p. 291; Faun. Bor. Amer. Birds. p. 94, pl. 32; Temm. Man. d'Orn. 1815, p. 54; Naum. Vog. Deuts. (1822) i. p. 501, t. 48, f. 2, 3; Schleg. Rev. Crit. des Ois. d' Eur. p. 15.

Nyctale pinetorum, Brehm, Vög. Deuts. i. p. 112.

Nyctale abietum, Brehm, Vog. Deuts. p. 113, t. 8, f. 3.

Nyctale planiceps, Brehm, Vog. Deuts. p. 113.

Noctua Tengmalmi, Cun. Reg. An. (1829), i. p. 345; Jenyns, Man. B. Vert. An. p. 94.

Athene Tengmalmi, Boie, Isis (1822), p. 549. Egolius Tengmalmi, Kaup, Naturl. Syst. p. 34.

Nyetale Richardsoni, Pr. Bonap. Geogr. Comp. List of B. Eur. and Amer. p. 7.

Ulula Tengmalmi, Audub. Syn. B. of Amer. p. 24; Macgill. Hist. Brit. B. iii. p. 45.

Strix passerina, Forst. Phil. Trans. lxii. p. 385.

Scotophilus Tengmalmi, Swains, Classif. of B. ii. p. 217.

The Little Owl, Bew. Brit. B. (1797) i. p. 54. Tengmalm's Owl, Eyton, R. Brit. B. p. 90; Yarr. Brit. B. 2 edit. i. p. 153, fig.

Penn. Brit. Zool. fol. pl.; Gould, B. of Eur. pl. 49. (Kent).

# ii. BUBONINÆ.

### 1. EPHIALTES.

Scops, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 105 (1809). Ephialtes, Keys. & Bl. Wirbelth. Eur. p. 33 (1840). Lophostrix, Less. Compl. Buff. Ois. vii. p. 261 (1836).

### a. EPHIALTES.

# 1. EPHIALTES SCOPS. The Scops eared Owl.

Ephialtes scops, G. R. Gray, Gen. of B. i. p. 38. Strix scops, Linn. S. N. i. p. 129; Temm. Man. d Orn. 1815, p. 45; Naum. Vög. Deuts. (1822) i. p. 466, t. 43, f. 3.

Strix zorca, Cetti, Uc. di Sardegn. p. 60. Strix carniolica, Gmel. S. N. i. p. 290.

Scops zorea, Swains. Classif. of B. ii. p. 217.

Strix gui, Scop. Ann. 1, No. 9.

Scops Aldrovandi (Ray), Flem. Brit. An. p. 57; Macgill. Hist. Brit. B. iii. p. 422; Eyton, Cat. Brit. B. p. 7; Pr. Bonap. Geogr. Comp. List of B. p. 6. Scops ephialtes, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 107. Scops europæus, Less. Tr. d'Orn. p. 106. Bubo scops, Boie, Isis (1822), p. 549; Jenyns, Man. B. Vert. An. p. 91. Scops carniolica, Brehm, Vög. Deuts. i. p. 126, t. 9, f. 3. Strix pulchella, Pall. Iter. i. p. 456. Scops pennata, Hodgs. Journ. A. S. B. (1837) p. 369. Scops sunia, Hodgs. Journ. A. S. B. (1837) p. 369; As. Res. xix. p. 175. Otus (Scops) japonicus, Temm. et Schl. Fauna Jap. t. 9. Scops senegalensis, Swains. B. of W. Afr. i. p. 127. Scops capensis, A. Smith, Cat. S. Afr. Mus. p. Otus (Scops) africana, Temm. et Schl. Fauna Jap. p. 27. Ephialtes scops, Keys. & Bl. Wirbelth. Eur. p. 33. Otus scops, Schleg. Rev. Crit. des Ois. d'Eur. p. 14. The Little-eared Owl, Mont. Orn. Dict. Suppl. App. Scops-eared Owl, Selby, Brit. Orn. i. p. 56; Yarr. Brit. B. 2 edit. i. p. 120, fig. Pl. enl. 436; Gould, B. of Eur. pl. 41.

#### 2. BUBO.

a. Great Britain. Purchased of Mr. Gould.

Bubo, Sibb. Scot. Illustr. lib. iii. p. 15; Swains. Faun. Bor. Amer. ii. p. 82 (1831).
Asio, Briss. Orn. i. p. 477 (1760); Swains. Classif. of B. ii. p. 217 (1837).
Heliaptex, Swains. Classif. of B. ii. p. 217 (1837).
Ascalaphia, I. Geoffr. Mem. du Mus. (1830).
Urrua, Hodgs. Journ. A. S. B. (1837), p. 372.
Mesomorpha, Hodgs. Journ. A. S. B. (1841) p. 28.
Huhúa, Hodgs. Journ. A. S. B. (1837) p. 362.
Etoglaux, Hodgs. Journ. A. S. B. (1841) p. 28.

#### а. Виво.

### 1. Bubo MAXIMUS. The great eared Owl.

Bubo maximus (Sibb.) Flem. Brit. An. p. 57; Jenyns, Man. B. Vert. An. p. 90; Macgill. Hist. Brit. B. üi. p. 428; Eyton, Cat. Brit. B. p. 7; Pr. Bonap. Geogr. Comp. List of B. p. 6; Keys. & Bl. Wirbelth. Eur. p. 33; G. R. Gray, Gen. of B. i. p. 37. Strix bubo, Linn. S. N. i. 131; Temm. Man. d'Orn. 1815, p. 43; Naum. Vög. Deuts. (1822) i. p. 440, t. 44
Asio bubo, Swains. Classif. of B. ii. p. 217.
Bubo atheniensis, Daud. Tr. d'Orn. ii. p. 209.
Bubo europæus, Less. Tr. d'Orn. p. 115, t. 17, f. 1.
Strix scandiaca, Linn. Faun. Suec. No. 70.
Bubo albus, Daud. Tr. d'Orn. ii. p. 209?
Bubo germanicus, Brehm, Vög. Deuts. i. p. 119.

Bubo septentrionalis, Brehm, Vög. Deuts. i. p. 120, t. 9, f. 1. Otus bubo, Schleg. Rev. Crit. des Ois. d'Eur. p. 13.

The great eared Owl, Bew. Brit. B. (1797) i. p. 45; Mont. Orn.

Dict.
Eagle Owl, Penn. Brit. Zool. (1812) i. p. 254, fig.; Yarr. Brit. B.

2 edit. i, p. 114, fig. Great horned or Eagle Owl, Selby, Brit. Orn. i, p. 50.

Pl. enl. 435; Gould, B. of Eur. pl. 37; Edwards, Birds, pl. 227. (Several counties of England and once in Ireland).

### iii. Syrniinæ.

### 1. SYRNIUM.

Syrnium, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 112 (1809). Alneo, Cuv. Kaup, Syst. der Eur. Thier. p. 45 (1829). Scotiaptex, Swains. Classif of B. ii. p. 216 (1837). Ulula, Cuv. Règ. An. (1817) i. p. 329. Ptynx, Blyth (1840). Bulaca, Hodgs. Journ. A. S. B. (1837) p. 372. Meseides, Hodgs. Journ. A. S. B. (1841) p. 28.

#### a. SYRNIUM.

#### 1. Syrnium aluco. The Tawny Owl.

Syrnium aluco, Cuv. Règ. An. (1817) i. p. 330; Brehm, Vög. Deuts. i. p. 116; Jenyns, Man. B. Vert. An. p. 92; Pr. Bonap. Geogr. Comp. List of B. p. 6; G. R. Gray, Gen. of B. i. p. 39.

Comp. List of B. p. 6; G. R. Gray, Gen. of B. i. p. 39.

Strix aluco, Linn. S. N. i. p. 130; Temm. Man. d'Orn. 1815, p. 50;

Naum. Vög. Deuts. (1822) i. p. 473, t. 46, t. 47, f. 1; Schleg. Rev. Crit. des Ois. d'Eur. p. 16.

Strix stridula, Linn. S. N. i. p. 133; Leach, Syst. Cat. Mam. & B. B. M. p. 11; Flem. Brit. An. p. 57.

Strix sylvatica, Shaw, Gen. Zool. vii. p. 253.

Syrnium ululans, Sav. Descr. de l'Egypte, Hist. Nat. i. p. 112.

Syrnium stridulum, Brehm, Vög. Deuts. i. p. 117; Eyton, Cat. Brit. B. p. 6.

Strix sylvestris, Scop. Ann. i. No. 13.

Strix alba, Scop. Ann. i. No. 14.

Strix noctua, Scop. Ann. i. No. 15.

Strix rufa, Scop. Ann. i. No. 16.

Ulula aluco, Macgill. Hist. Brit. B. iii. p. 438; Keys. & Bl. Wirbelth. Eur. p. 32.

The Tawny Owl, Bew. Brit. B. (1797) i. p. 53, fig.; Mont. Orn.
Dict.; Penn. Brit. Zool. (1812) i. p. 266; Selby, Brit. Orn. i. p. 62; Yarr. Brit. B. 2 edit. i. p. 138, fig.

Pl. enl. 441, 437; Gould, B. of Eur. pl. 47.

4. Wiltshire. From Col. Montagu's collection.

b, c. Carmarthenshire. From Col. Montagu's collection.

d. Devonshire. Presented by Sir W. Ellford, Bart.

e. Chick. From Mr. Bullock's museum.

f. Cambridgeshire. Young. From Mr. J. Baker's collection.

g. Sternum. England. Presented by T. Ingall, Esq.

h. Sternum. England. Presented by John Ray, Esq.

#### . 2. OTUS.

Otus, Cuv. Comp. Anat. i. Sec. Tab. Classif. des Ois. (1797-1800). Brachyotus, Gould, Proc. Z. S. (1837) p. 10.

Nyctalops, Wagl. Isis (1832) p. 1221.

Asio, Swains. Faun. Bor. Amer. ii. p. 72 (1831); Macgill. Hist. Brit. B. iii. p. 450 (1840).

Egolius, Keys. & Bl. Wirbelth. Eur. p. 32 (1840).

#### a. OTUS.

### 1. OTUS VULGABIS. The long-eared Owl.

Otus vulgaris, Flem. Brit. An. p. 60; Hodgs. Journ. A. S. B. (1837) p. 369; Jenyns, Man. B. Vert. An. p. 91; Eyton, Cat. Brit. B. p. 5; Pr. Bonap. Geogr. Comp. List of B. p. 7; G. R. Gray, Gen. of B. i. p. 40.

Strix otus, Linn. S. N. i. p. 134; Pl. enl. 22; Naum. Vog. Deuts. (1822) i. p. 451, t. 45, f. 1; Temm. Man. d Orn. 1815, p. 44. Strix soloniensis, Gmel. S. N. i. p. 293.

Otus europæys, Steph. Gen. Zool. xiii. p. 57.

Bubo otus, Boie, Isis (1822), p. 549. Otus communis, Less. Tr. d'Orn. p. 110.

Strix (Asio) otus, Richard, & Sw. Faun, Bor, Amer. Birds, p. 72.

Otus sylvestris, Brehm, Vög. Deuts. i. p. 121. Otus arboreus, Brehm, Vog. Deuts. i. p. 122.

Otus gracilis, Brehm, Vog. Deuts. i. p. 123, t. 9, f. 2.

Otus americanus, Pr. Bonap. Geogr. Comp. List of B. Eur. and N. Amer. p. 7.

Otus Wilsonianus, Less. Tr. d'Orn. p. 110, Asio otus, Macgill. Hist. Brit. B. iii. p. 453.

Otus asio, Leach, Syst. Cat. Mam. and B. B. M. p. 11.

Ægolius otus, Keys. & Bl. Wirbelth. Eur. p. 32.

The Long-eared Owl, Bew. Brit. B. (1797) i. p. 46, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 258, pl. xxxi.; Selby, Brit. Orn. i. p. 52; Yarr. Brit. B. 2 edit. i. p. 124, fig. Gould, B. of Eur. pl. 39.

a. Oxfordshire. Male. From Col. Montagu's collection.

b. Great Britain. Female. Presented by J. Warniford, Esq.

c. Great Britain.

Variety. d. Great Britain.

e. Sternum. England. Presented by T. Ingall, Esq. f. Sternum. England. Presented by John Ray, Esq.

# b. Brachyotus.

# 2. OTUS BRACHYOTUS. The short-eared Owl.

Otus brachyotus, Boie, Isis (1822), p. 549; Hodgs. Journ. A. S. B. (1837) p. 369; Flem, Brit. An. p. 56; Jenyns, Man. B. Vert. An. p. 92; Naum. Vög. Deuts. (1822) i. p. 459, t. 45, f. 2; Eyton, Cat. Brit. B. p. 6; Schleg. Rev. Crit. des Ois. d'Eur. p. 14; G. R. Gray, Gen. of B. i. p. 40.

Strix brachyotus, Gmel. S. N. i. 289'; Temm. Man. d'Orn. 1815, p. 46.

Otus ulula, Cuv. Règ. An. (1817) i. p. 328.

Strix ægolius, Pall. Zoogr. i. p. 309.

Strix ulula, Pall. Zoogr. i. p. 322.

Strix accipitrina, Pall. It. i. p. 455.

Strix caspia, Shaw, Gen. Zool. vii. p. 272.

Otus palustris, Brehm, Vög. Deuts. i. p, 124; Gould, Voy. of Beagle, Birds, p. 33.

Otus agrarius, Brehm, Vög. Deuts. i. p. 124.

Brachyotus palustris, Gould, Bonap. Geogr. Comp. List B. of Eur. and N. Amer. p. 7.

Strix arctica, Sparrm. Mus. Carls. t. 51.

Strix tripennis, Schranks, Faun. Boica, p. 112.

Strix palustris, Smies. Voq.

Strix brachyura, Nils. Faun. Suec. i. p. 62.

Strix (Asio) brachyotus, Richard. and Sw. Faun. Bor. Amer. Birds, p. 75.

Asio brachyotus, Macgill. Hist. Brit. B. iii. p. 461.

Otus microcephalus, Leach, Syst. Cat. Mam. & B. B. M. p. 11.

Egolius brachyotus, Keys. & Bl. Wirbelth. Eur. p. 32.

The Short-eared Owl, Bew. Brit. B. (1797) i. p. 48, fig., p. 50, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 260, pl. xxxii.; Selby, Brit. Orn. i. p. 54; Yarr. Brit. B. 2 edit. i. p. 128, fig. Pl. enl. 438; Gould, B. of Eur. pl. 40.

- a. Gloucestershire. From Col. Montagu's collection.
- b. Great Britain. From Col. Montagu's collection.
- c. Great Britain.
- d—f. Hills of Offed, Orkney. Young. From Mr. J. Baker's collection.
- g. Hills of Offed. Male. From Mr. J. Baker's collection.
- h. London Market. Female. From Mr. J. Baker's collection.
- i. Trachea. England.
- j. Sternum. England. Presented by T. Ingall, Esq.
- k. Sternum. England. Presented by John Ray, Esq.

### iv. Striginæ.

#### 1. STRIX.

Strix, Linn. Nat. Syst. (1735). Aluco, Flem. Phil. of Zool. ii. p. 236 (1822). Hybris, Nitzsch, Pterylog. p. 110 (1840). Stridula, Sel. Longch. (1842).

#### 1. STRIX FLAMMEA. The Barn Owl.

Strix flammea, Linn. Syst. Nat. i. 133; Temm. Man. d'Orn. 1815, p. 52; Leach, Syst. Cat. Mam. & B. B. M. p. 11; Brehm, Voy. Deuts. i. p. 106; Jenyns, Man. B. Vert. An. p. 92; Naum, Vog. Deuts. (1822) i. p. 483, t. 47, f. 2; Macgill. Hist. Brit. B. iii. p. 473; Eyton, Cat. Brit. B. p. 6; Pr. Bonap. Geogr. Comp. List of B. p. 7; Keys, & Bl. Wirbelth. Eur. p. 31; Schleg. Rev. Crit. des Ois. d'Eur. p. 15; G. R. Gray, Gen. of B. i. p. 41.

Strix guttata, Brehm, Vog. Deuts. i. p. 106, t. 7, f. 3.

Aluco flammeus, Flem. Brit. An. p. 57.

The White Owl, Bew. Brit. B. (1797) i. p. 51, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 263.

Barn or White Owl, Selby, Brit. Orn. i. p. 60; Yarr. Brit. B. 2 edit. i. p. 133, fig.

Pl. enl. 440; Gould, B. of Eur. pl. 36.

- a. Devonshire. From Col. Montagu's collection.
- b. Combe Wood. Presented by Mr. Leadbeater. c. Epping. Presented by Henry Doubleday, Esq.
- d. Cambridgeshire. From Mr. J. Clark's collection.

e. Devonshire. Young.

- f, g. Cambridgeshire. Young. Presented by Mr. J. Baker. h. Sternum. England. Presented by T. Ingall, Esq. i. Sternum. England. Presented by John Ray, Esq.

# ORDER II. PASSERES.

Passeres, Linn. (1735); Lath. (1790); Cuv. (1795—1796).
Picse, pt. Linn. (1735); Lath. (1790).
Hymenopodes, Mæhring (1752).
Scansores, pt. Cuv. (1799—1800); Illig. (1811); Cabanis (1847).
Ambulatores, Illig. (1811).
Chelidones—Aleyones—Coraces—Canori—Passerini—Scansores, pt. Temm. (1815).
Sylvicolæ, anisodactyli—S. zygodactyli, pt. Vieill. (1816).
Anisodactyli—Insectivores—Omnivores—Granivores, Temm. (1820).
Passeri, Ranz. (1823).
Insessores, Vigors (1826).
Scansores, pt.—Oscines, Keys. & Bl. (1840).
Strisores—Clamatores, pt. Cabanis (1847).

# Tribe I. FISSIROSTRES.

Passeres, pt. Linn. (1735); Mahr. (1752).

Picæ, pt. Linn. (1735). Accipitres, pt. Mæhr. (1752).

Plumipedes, pt.—Fissipedes isodactyles — F. anisodactyles, conicusubulirostres, pt.—Anomalipedes, pt. Schæff. (1774).

Scutipedes, pt.—Negliges, pt.—Brevipedes, Scop. (1777).

Picte, pt. Lath. (1790).

Planirostres—Tenuirostres, pt. — Cuneirostres, pt.—Lævirostres, pt. Cuv. (1799—1800).

Hiantes—Coraces, pt.—Canori, pt.—Dentirostres, pt.—Serrati, pt.—Amphiboli, pt.—Angulirostres—Syndactyli, *Illig.* (1811). Chelidones—Alciones, *Temm.* (1815).

Chelidones—Baccivori, pt. — Prionites, pt. — Barbati, pt.—Pelmatodes—Aureoli, Vieill. (1816).

Fissirostres—Syndactyles—Scansores, pt. — Conirostres, pt. — Dentirostres, pt. Cuv. (1817).

Omnivores, pt.—Insectivores, pt.—Zygodactyli, pt. Temm. (1820).
Pogonofori, pt.—Sindactili — Pelmatodi — Ifalti, pt.—Plereoramfi
—Euristomi, pt.—Chelidonii—Piezoramfi, Ranz. (1823).
Fissipottes, Conjunctor, pt. Sangapage, pt. Vices. (1826).

Fissirostres—Conirostres, pt.—Scansores, pt. Vigors (1826).

Heterodactyles, pt. Less. (1831).

Gregarii, pt.—Serrati, pt.—Sagittilingues—Amphiboli, pt.—Angulirostres, Pr. Bonap. (1831).

Oscines, pt.—Scansores, pt. Keys. & Bl. (1840).

Volitatrices—Jaculatrices—Excurtrices, pt. Macgill. (1840). Macrochires—Oscines, pt.—Clamatores, pt. Cabanis (1847).

# Sub-Tribe 1. FISSIROSTRES NOCTURNÆ.

# FAM. I. CAPRIMULGIDÆ.

# i. CAPRIMULGINÆ.

### 1. CAPRIMULGUS.

Caprimulgus, Linn. S. N. (1756). Hirundo, pars, Linn. S. N. (1735). Nyctichelidon, Renn. Mont. Orn. Dict. (1831), p. 342. Antrostomus, Gould, Bonap. Comp. List of Birds (1838). Hydropsalis, Wagl. Isis (1832), p. 1222. Psalurus, Swains. Classif. of B. ii. p. 339 (1837).

### a. CAPRIMULGUS.

# I. CAPRIMULGUS EUROPÆUS. The European Goatsucker.

Caprimulgus europæus, Linn. S. N. i. p. 286; Temm. Man. d'Orn. 1815, p. 273; Leach, Syst. Cat. Mam. § B. B. M. p. 19; Flem. Brit. An. p. 62; Jenyns, Man. B. Vert. An. p. 160; Naum. Vög. Deuts. (1833) vi. p. 141, t. 148; Macgill. Hist. Brit. B. iii. p. 633; Eyton, Cat. Brit. B. p. 27; Pr. Bonap. Geogr. Comp. List. of B. p. 8; Keys. § Bl. Wirbelth. Eur. p. 33; Schleg. Rev. Crit. des Ois. d'Eur. p. 20.

Caprimulgus punctatus, Meyer, Taschenb. Deuts. i. p. 284; Brehm, Vög. Deuts. i. p. 130.

Caprimulgus maculatus, Brehm, Vög. Deuts. i. p. 131, t. 10, f. 1. Caprimulgus vulgaris, Vieill.

Nyctichelidon europæus, Renn. Mont. Orn. Dict. p. 335.

The Night-jar, Bew. Brit. B. (1797) i. p. 262, fig.; Yarr. Brit. B. 2 edit. ii. p. 270, fig.

European Goatsucker, Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 136.

Nocturnal Goatsucker, Penn. Brit. Zool. (1812), p. 566, pl. lxvi. Pl. enl. 193; Gould, B. of Eur. pl. 51.

a. Devonshire. Male. From Col. Montagu's collection.

b. Devonshire. Female. From Col. Montagu's collection.

c-e. Cambridgeshire. Males. Presented by Mr. J. Baker.

f. Cambridgeshire. Female. Presented by Mr. J. Baker.

g, h. Cambridgeshire. Young. Presented by Mr. J. Baker. Sternum. England. Presented by John Ray, Esq.

### Sub-Tribe 2. FISSIROSTRES DIURNÆ.

### FAM. II. HIRUNDINIDÆ.

#### i. CYPSELINÆ.

#### 1. CYPSELUS.

Cypselus, Ill. Prod. Mam. p. 229 (1811). Apus, Scop. Introd. Hist. Nat. p. 483 (1777). Micropus, Meyer & Wolf. Tasch. Deuts. Vög. i. p. 280 (1810). Brachypus, Meyer, Vög. Liv. und Esthl. Tachornis, Gosse, B. of Jam. p. 58 (1848).

#### a. Cypselus.

#### 1. CYPSELUS MELBA. The White-bellied Swift.

Hirundo melba, Linn. S. N. i. p. 345.

Cypselus melba, Ill. Prod. Mam. & Av. p. 230; Naum. Vög. Deuts. (1833) vi. p. 115, t. 147, f. 1; Brehm, Vög. Deuts. p. 134; Macgill. Hist. Brit. B. iii. p. 611; Pr. Bonap. Geogr. Comp. List of B. p. 8; Keys. & Bl. Wirbelth. Eur. p. 33; Schleg. Rev. Crit. des Ois. d'Eur. p. 20; G. R. Gray, Gen. of B. i. p. 54.

Apus melba, Cuv. Reg. An. (1817) i. p. 373.

Micropus melba, Boie, Isis (1844), p. 165.

Hirundo alpina, Scop. Ann. i. p. 166.

Cypselus alpinus, Temm. Man. d'Orn. 1815, p. 270; Brehm, Vög. Deuts. i. p. 134; Jenyns, Man. B. Vert. An. p. 159; Eyton, Brit. B. p. 26.

Micropus alpinus, Meyer & Wolf, Taschenb. Deuts. i. p. 282. Cypselus alpinus, africanus, Tenm. Man. d'Orn. 1815, p. 270. Cypselus gutturalis, Vieill. N. Dict. d'Hist. Nat. xix. p. 422. Hirundo gularis, Steph. Gen. Zool. x. p. 99.

The White-bellied Swift, Eyton, Hist. R. Brit. B. p. 17. The Alpine Swift, Yarr. Brit. B. 2 edit. ii. p. 266, fig.

Edward's Birds, pl. 27; Levaill. Ois. d'Afr. t. 243. (Isle of Thanet, Norfolk, Essex and Ireland).

#### 2. CYPSELUS APUS. The common Swift.

Hirundo apus, Linn. S. N. i. p. 344.

Apus - ? Cuv. Règ. An. (1817) i. p. 373.

Cypselus apus, Ill. Prod. Mamm. & Av. p. 230; Brehm, Vög. Deuts. i. p. 136; Flem. Brit. An. p. 61; Jenyns, Man. B. Vert. An. p. 159; Naum. Vög. Deuts. (1833) i. p. 123, t. 147, f. 2; Eyton, Cat. Brit. B. p. 26; Pr. Bonap. Geogr. Comp. List of B. p. 1; Keys. & Bl. Wirbelth. Eur. p. 33; Schleg. Rev. Crit. des Ois. d'Eur. p. 19; G. R. Gray, Gen. of B. i. p. 54.

Cypselus vulgaris, Steph. Gen. Zool. x. p. 72.

Micropus murarius, Meyer & Wolf, Tasch. Deuts. i. p. 281. Brachypus murarius, Meyer, Vög. Liv. und Esthl. p. 143.

Micropus apus, Boie, Isis (1844) p. 165.

Cypselus murarius, Temm. Man. d'Orn. 1815, p. 271; Brehm, Vög. Deuts. p. 135; Macgill. Hist. Brit. B. iii. p. 614.

Cypselus caffer, Licht. Cat. Dupl. Berl. Mus. p. 68.

Cypselus niger, Leach, Syst. Cat. Mam. & B. B. M. p. 19.

The Swift, Bew. Brit. B. (1797) i. p. 259, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 550.

The Common Swift, Selby, Brit. Orn. i. p. 133; Yarr. Brit. B. 2 edit. ii. p. 260.

Pl. enl. 242, f. 1.

a. London. Presented by J. F. Stephens, Esq.

b. Hampshire. Female. Presented by Mr. G. L. Scott.

c. Turnham Green. From Mr. J. Baker's collection.
d. Sternum. England. Presented by T. Ingall, Esq.

#### 2. ACANTHYLIS.

Acanthylis, Boie, Isis (1826), p. 971. Chætura, Steph. Gen. Zool. xiii. p. 76 (1825). Hirund-apus, Hodgs. Journ. A. S. B. (1836) p. 780. Hemiprocne, Nitzsch, Pterylog. p. 123 (1840). Pallene, Less. Compt. Buff. viii. p. 496 (1837).

#### a. HIRUND-APUS.

1. ACANTHYLIS CAUDACUTA. The Australian spine-tailed Swallow.

Acanthylis caudacuta, G. R. Gray, Ann. of Nat. Hist. (1843) p. 194? Newm. Zoologist, iv. p. 1492, fig.
Hirundo caudacuta, Lath. Ind. Orn. Suppl. p. lvii.?
Australian Spine-tailed Swallow, Newm. Zool. iv. 1492.
(In the neighbourhood of Colchester).

### ii. Hirundininæ.

#### 3. HIRUNDO.

Hirundo, Linn. Syst. Nat. (1735). Cecropis, Boie, Isis, 1826, p. 971. Herse, Less. Compl. Buff. viii. p. 496 (1837).

#### a. HIRUNDO.

1. HIBUNDO BUSTICA. The Chimney Swallow.

Hirundo rustica, Linn. S. N. i. p. 343; Temm. Man. d'Orn. 1815, p. 265; Leach, Syst. Cat. Mam. & B. B. M. p. 19; Flem. Brit. An. p. 60; Jenyns, Man. B. Vert. An. p. 157; Naum. Vög. Deuts. (1833) vi. p. 49, t. 145, f. 1; Macgill. Hist. Brit. B. iii. p. 558; Eyton, Cat. Brit. B. p. 26; Pr. Bonap. Geogr. Comp. List of B. p. 9; Keys. & Bl. Wirbelth. Eur. p. 61; Schleg. Rev. Crit. des Ois. d'Eur. p. 18; G. R. Gray, Gen. of B. i. p. 57. Hirundo domestica, Pall. Zoogr. i. p. 528.

Cecropis rustica, Boie, Isis (1826), p. 971; Brehm, Vög. Deuts. p. 138.

Cecropis pagorum, Brehm, Vög. Deuts. p. 138.

The Chimney Swallow, Bew. Brit. B. (1797) i. p. 252, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 543, pl. lxv. f. upp.; Selby, Brit. Orn. i. p. 126.

The Swallow, Yarr. Brit. B. 2 edit. ii. p. 231, fig.

Pt. enl. 543, f. 1; Gould, B. Eur. pl. 54.

a. Great Britain. Presented by Maj.-Gen. T. Hardwicke.

b. Cambridgeshire. Presented by Mr. J. Baker.

c. England. White variety.

d. Hayling Island. White variety. Presented by Alfred Miller, Esq.

e. Cambridgeshire. Young. From Mr. J. Baker's collection.

#### 2. PROGNE.

Progne, Boie, Isis (1826), p. 971.

# 1. PROGNE PURPUREA. The purple Swallow.

Hirundo purpurea, Linn. S. N. î. p. 344.
Hirundo violacea, Gmel. S. N. i. p. 1026.
Hirundo cœrulea, Vicill. Ois. d'Amér. Sept. t. 26, 27.
Hirundo subis, Linn. S. N. i. p. 344.
Progue purpurea, Boie, Isis (1826), p. 971.
Hirundo versicolor, Vicill. N. Dict. d'Hist. Nat. x. 509.
Hirundo ludoviciana, Cuv. Règ. Anim. (1817) p. 374.
Hirundo (Cecropis) violacea, Less. Compl. Buff. viii, p. 498.
Progue purpurea, Boie, Isis (1826), p. 971; Pr. Bonap, Geogr.
Comp. List of B. p. 8; G. R. Gray, Gen. of B. i. p. 59.
American purple Martin, Yarr. Brit. B. 2 edit. p. 257, fig.

Catesby's Carol. pl. 51; Pl. enl. 722; Edward's Birds, pl. 120. (Paddington and county of Dublin).

### 3. COTYLE.

Cotyle, Boie, Isis (1822), p. 550. Biblis, Less. Compl. Buff. viii. p. 495 (1837).

### 1. COTYLE RIPARIA. The Sand Martin.

Cotyle riparia, Boie, Isis (1822), p. 550; Brehm, Vög. Deuts. i. p. 143; Pr. Bonap. Geogr. Comp. List of B. p. 9; G. R. Gray, Gen. of B. i. p. 60.

Hiraudo riparia, Linn. S. N. i. p. 344; Temm. Man. d'Orn. 1815, p. 267; Leach, Syst. Cat. Mam. and B. B. M. p. 19; Flem. Brit. An. p. 61; Jenyns, Man. B. Vert. An. p. 158; Naum. Vög. Deuts. (1833), i. p. 100, t. 146, f. 1, 2; Macgill. Hist. Brit. B. iii. p. 595; Eyton. Cat. Brit. B. p. 26; Schleg. Rev. Crit. des Ois. d'Eur. p. 19.

Cotyle fluviatilis, Brehm, Vog. Deuts. i. p. 142, t. x. f. 5. Cotyle microrhynchos, Brehm, Vög. Deuts. i. p. 143. Hirundo (Cotyle) riparia, Keys. & Bl. Wirbelth. Eur. p. 61. The Sand Martin, Bew. Brit. B. (1797), i. p. 258; Mont. Orn. Dict.; Penn. Brit. Zool. (1812), i. p. 549; Selby, Brit. Orn. i. p. 131; Yarr. Brit. B. 2 edit. ii. p. 251, fig. Pl. enl. 543, f. 2; Gould, B. of Eur. pl. 58.

a. Wiltshire. From Col. Montagu's collection.

b. Bushy Hall. From Mr. J. Baker's collection.

#### 4. CHELIDON.

Chelidon, Boie, Isis (1822), p. 550.

#### 1. CHELIDON URBICA. The Martin Swallow.

Hirundo urbica, Linn. S. N. i. p. 344; Temm. Man. d'Orn. 1815, p. 266; Flem. Brit. An. p. 61; Jenyns, Man. B. Vert. An. p. 159; Naum. Vög. Deuts. (1833), i. p. 73, t. 145, f. 2; Macgill. Hist. Brit. B. iii. p. 573; Eyton, Cat. Brit. B. p. 26; Schleg. Rev. Crit. des Ois. d'Eur. p. 19. Chelidon urbica, Boie, Isis (1822), p. 550; Brehm, Vog. Deuts. i. p. 139, t. x. f. 4; Pr. Bonap. Geogr. Comp. List of B. p. 8; G. R. Gray, Gen. of B. i. p. 60. Hirundo lagopoda, Pall. Zoogr. i. p. 532. Chelidon fenestrarum, Brehm, Vog. Deuts. i. p. 140. Chelidon rupestris, Brehm, Vög. Deuts. i. p. 140. Hirundo domestica, Leach, Syst. Cat. Mam. and B. B. M. p. 19. Hirundo (Chelidon) urbica, Keys. & Bl. Wirbelth. Eur. p. 61. The Martin, Bew. Brit. B. (1797), i. p. 255, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812), i. p. 547; Selby, Brit. Orn. i. p. 129; Yarr. Brit. B. 2 edit. ii. p. 245, fig. Pl. enl. 542, f. 2; Gould, B. of Eur. pl. 57.

a. Cambridgeshire. Presented by Mr. J. Baker.

b. Cambridgeshire.

c. Devonshire. From Col. Montagu's collection.

d. Devonshire. Var. white. From Col. Montagu's collection.

# FAM. III. CORACHDÆ.

#### i. CORACHNE.

#### 1. CORACIAS.

Coracias, Linn. S. N. (1735). Galgulus, Briss. Orn. ii. p. 63 (1760).

# 1. CORACIAS GARRULA. The garrulous Roller.

Coracias garrula, Linn, S. N. i. p. 159; Temm. Man. d'Oru. 1815, p. 78; Brehm, Vög. Deuts. i. p. 160, t. xi. f. 5; Flem. Brit. An. p. 88; Jenyns, Man. B. Vert. An. p. 156; Naum. Vög. Deuts. (1822), ii. p. 158, t. 60; Macgill. Hist. Brit. B. iii. p. 540; Eyton, Cat. Brit. B. p. 25; Pr. Bonap. Geogr. Comp. List of B. p. 9; Keys. & Bl. Wirbelth. Eur. p. 35; Schleg. Rev. Crit. des Ois. d'Eur. p. 56; G. R. Gray, Gen. of B. i. p. 62.

The Garrulous Roller, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 300, pl. xxxviii.; Selby, Brit. Orn. i. p. 86.

The Roller, Bew. Brit. B. (1797) i. p. 85, fig.; Yarr. Brit. B. 2 edit. ii. p. 211, fig.

Pl. enl. 486; Levaill. Ois. de Parad. t. 32, 33; Gould, B. of Eur.

a. Great Britain.

# FAM. IV. ALCEDINIDÆ.

### i. ALCEDININE.

# 1. ALCEDO.

Alcedo, Linn. S. N. (1756). Ispida (pars), Linn. S. N. (1735). Corythornis, Kaup, Verhandl. Darmst. (1848). Ispidina, Kaup, Verhandl. Darmst. (1848).

# a. ALCEDO.

# 1. ALGEDO ISPIDA. The common Kingfisher.

Alcedo ispida, Linn. S. N. i. p. 179; Temm. Man. d'Orn. 1815, p. 262; Leach, Syst. Cat. Mam. § B. B. M. p. 26; Brehm, Vög. Deuts. i. p. 148; Flem. Brit. An. p. 90; Jenyns, Man. B. Vert. An. p. 157; Naum. Vög. Deuts. (1826) v. p. 479, t. 144; Macgill.

Hist. Brit. B. iii. p. 671; Eyton, Cat. Brit. B. p. 28; Pr. Bonap. Geogr. Comp. List of B. p. 9; Keys. & Bl. Wirbelth. Eur. p. 35; Schleg. Rev. Crit. des Ois. d'Eur. p. 52; G. R. Gray, Gen. of B. i. p. 81.

Gracula Atthis, Gmel. S. N. i. p. 398.

Alcedo subispida, Brehm, Vög. Deuts. i. p. 149.

Alcedo advena, Brehm, Vog. Deuts. i. p. 150, t. xi. f. 2.

Common Kingfisher, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 326, pl. xlii. fig. low.; Selby, Brit. Orn. i. p. 121. The Kingfisher, Yarr. Brit. B. 2 edit. ii. p. 223, fig.

Pl. enl. 77; Kittl. Kupf. Vög. t. 29, f. 1; Gould, B. of Eur. pl. 61.

- a. Devonshire. From Col. Montagu's collection.
- b, c. Great Britain.
- d, e, Cambridgeshire. Young. Presented by Mr. J. Baker.

f. Sternum. England. Presented by T. Ingall, Esq.

g. Sternum. England. Young. Presented by T. Ingall, Esq.

#### 2. CERYLE.

Ceryle, Boie, Isis, 1828, p. 316. Ispida, Swains. Classif. of B. ii. p. 336 (1837).

# 1. CERYLE ALCYON. The belted Kingfisher.

Alcedo alcyon, Linn. S. N. i. p. 180; Thompson, Ann. & Mag. Nat. Hist. 1847, p. 313.

Ceryle alcyon, Boie, Isis (1828), p. 316. Ispida alcyon, Swains. Classif. of B. ii. p. 336.

Wils. Amer. Orn. pl. 23, f. 1; Pl. enl. 715. (Ireland).

# FAM. V. MEROPIDÆ.

# i. MEROPINÆ.

#### 1. MEROPS.

Merops, Linn. S. N. (1756). Ispida (pars), Linn. S. N. (1735). Apiaster, Briss. Orn. iv. p. 532 (1760).

#### 1. MEROPS APIASTER. The common Bee-eater.

Merops apiaster, Linn. S. N. i. p. 182; Temm. Man. d'Orn. 1815, p. 260; Brehm, Vög. Deuts. i. p. 147; Flem. Brit. An. p. 90; Jenyns, Man. B. Vert. An. p. 156; Naum. Vög. Deuts. (1826) v. p. 462, t. 143; Maegill. Hist. Brit. B. iii. p. 685; Eyton, Cat. Brit. B. p. 28; Pr. Bonap. Geogr. Comp. List of B. p. 9; Keys. & Bl. Wirbelth. Eur. p. 35; Schleg. Rev. Crit. des Ois. d'Eur. p. 52; G. R. Gray, Gen. of B. i. p. 86.

Merops chrysocephalus, Gmel. S. N. i. p. 463.

Merops schæghagha, Forsk. Faun. Arab. 1.

Merops hungariæ, Brehm, Vög. Deuts. i. p. 146, t. xi. f. l.

Bee-eater, Mont. Orn. Dict.; Yarr. Brit. B. 2 edit. ii. p. 217, fig. Common Bee-eater, Penn. Brit. Zool. (1812) i. p. 339; Selby, Orn. Dict. i. p. 123.

Pl. enl. 938; Gould, B. of Eur. pl. 59.

a. Presented by Maj.-Gen. T. Hardwicke. b. Devonshire. Presented by Addis Archer, Esq.

### Tribe II. TENUIROSTRES.

Picæ, pt. Linn. 1735; Mæhr. (1752); Lath. (1790).

Plumipedes, pt. Schaff. (1774).

Fissipedes anisodactyles, cuneirostres — F. a. filirostres — F. a. falcirostres, Schaff. (1774).

Scutipedes, pt. Negliges, pt. Scop. (1777).

Tenuirostres, pt.—Dentirostres, pt.—Plenirostres, pt. Cuv. (1799—1800).

Tenuirostres — Gregarii, pt. — Pygarrhichi — Suspensi — Gallinacei, pt. Illiger (1811).

Anthomysi-Epopsides-Anerpontes-Lyriferi, Vieill. (1816).

Scansores, pt. Temm. (1815).

Tenuirostres - Conirostres, pt. - Dentirostres, pt. Cuv. (1817).

Anisodactyli-Insectivores, pt. Temm. (1820).

Anerponti — Antomisi — Epopsidi — Rafioramfi — Metrioramfi, Ranz. (1823).

Tenuirostres—Scansores, pt.—Rasores, pt. Vigors (1826). Fissirostres, conirostres anisodactyles, pt. Less. (1831).

Tenuirostres-Anthomyzi-Canori, pt. Pr. Bonap. (1831).

Scansores, pt.—Oscines, pt. Keys. & Bl. (1840).

Raptatrices, Macgill. (1840).

Clamatores, pt. - Oscines, pt. Cabanis (1847).

#### FAM. I. UPUPIDÆ.

#### i. UPUPINE.

#### 1. UPUPA.

Upupa, Linn. S. N. (1735).

? Fregilupus, Less. Tr. d'Orn. p. 323 (1831).

# 1. UPUPA EPOPS. The common Hoopoe.

Upupa Epops, Linn. S. N. i. p. 183; Temm. Man. d'Orn. 1815, p. 256; Leach, Syst. Cat. Mam. & B. B. M. p. 26; Brehm, Vög. Deuts. i. p. 215; Flem. Brit. An. p. 89; Jenyns, Man. B. Vert. An. p. 153; Naum. Vög. Deuts. (1826) v. p. 437, t. 142; Macgill. Hist. Brit. B. iii. p. 41; Eyton, Cat. Brit. B. p. 27; Pr. Bonap. Geogr. Comp. List of B. p. 10; Keys. & Bl. Wirbelth. Eur. p. 35; Schleg. Rev. Crit. des Ois. d'Eur. p. 52; G. R. Gray, Gen. of B. i. p. 90.

Upupa bifasciata, Brehm, Vög. Deuts. p. 215, t. xv. f. 2.

The Hoopoe, Bew. Brit. B. (1797) i. p. 123, fig.; Selby, Brit. Orn. i. p. 118; Yarr. Brit. B. 2 edit. ii. p. 175, fig.

Common Hoopoe, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 342, pl. xliii. fig. low.

Pl. enl. 52; Gould, B. of Eur. pl. 238.

a. Bigberry, Devonshire. From Col. Montagu's collection.

# FAM. II. CERTHIDÆ.

# i. CERTHINÆ.

### 1. CERTHIA.

Certhia, Linn. S. N. (1735).

# 1. CERTHIA FAMILIARIS. The common Creeper.

Certhia familiaris, Linn. S. N. i. p. 184; Temm. Man. d'Orn. 1815, p. 252; Leach, Syst. Cat. Mam. & B. B. M. p. 26; Flem. Brit. An. p. 88; Brehm, Vög. Deuts. p. 209; Jenyns, Man. B. Vert. An. p. 152; Naum. Vög. Deuts. (1826) v. p. 398, t. 140; Macgill. Hist. Brit. B. iii. p. 33; Eyton, Cat. Brit. B. p. 27; Pr. Bonap. Geogr. Comp. List of B. p. 11; Keys. & Bl. Wirbelth. Eur. p. 47; Schleg. Rev. Crit. des Ois. d'Eur. p. 47; G. R. Gray, Gen. of B. iii. p. 143.

Certhia scandulaca, Pall. Zoogr. i, p. 432.

Certhia macrodactyla, Brehm, Vog. Deuts. p. 208.

Certhia septentrionalis, Brehm, Vög. Deuts. p. 210, t. xv. f. 5. Certhia brachydactyla, Brehm, Vög. Deuts. p. 210. Certhia megarhyuchos, Brehm, Vog. Deuts. p. 211.

The Creeper, Bew. Brit. B. (1797) i. p. 125, fig.

Common Creeper, Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 116; Yarr. Brit. B. 2 edit. ii. p. 165, fig.

Familiar Creeper, Penn. Brit. Zool. (1812) i. p. 345, pl. xliii. fig. upp.

Pl. enl. 681, f. 1; Gould, B. of Eur. pl. 237.

a. Devonshire. Male. From Col. Montagu's collection. b. Devonshire. Female. From Col. Montagu's collection.

c, d. Hoxne, Suffolk. Presented by the Rev. H. Kirby.

e. Skull. England. Presented by John Ray, Esq.

### ii. SITTINÆ.

#### 1. SITTA.

Sitta, Linn. S. N. (1735). Orthorhynchus, Horsf. Dendrophila, Swains. Classif. of B. ii. p. 318 (1837).

# 1. SITTA EUROPÆA. The Nuthatch.

Sitta europæa, Linn. S. N. i. p. 177; Temm. Man. d'Orn. 1815. p. 249; Leach, Syst. Cat. Mam. & B. B. M. p. 25; Flem. Brit. An. p. 81; Jenyns, Man. B. Vert. Anim. p. 154; Naum. Vög. Deuts. (1826) i. p. 337, t. 139; Macgill. Hist. Brit. B. iii. p. 48; Eyton, Cat. Brit. B. p. 10; Pr. Bonap. Geogr. Comp. List of B, p. 10; Keys. & Bl, Wirbelth, Eur. p. 44; Schleg. Rev. Crit. des Ois, d'Eur. p. 48.

Sitta cæsia, Meyer, Taschenb. Deuts, i. p. 128.

Sitta pinetorum, Brehm, Vog. Deuts. p. 205, t. xiv. f. 4.

Sitta foliorum, Brehm, Vög. Deuts. p. 206.

Sitta septentrionalis, Brehm, Vag. Deuts. p. 206?

Sitta advena, Brehm, Vog. Deuts. p. 207? Sitta affinis, Blyth, Journ. A. S. B. xv. p. 288.

Nuthatch, Bew. Brit. B. (1797) i. p. 121, fig.; Selby, Brit. Orn. i. p. 113; Yarr. Brit. B. 2 edit. ii. p. 183, fig.

European Nuthatch, Mont. Orn. Dict.; Penn. Brit. Zool. (1812), p. 336, pl. xlii. fig. upp.

Pl. enl. 623, f. 1; Gould, B. of Eur. pl. 234.

a. Suffolk. Presented by the Rev. H. Kirby.

### iii. *Menurinæ.*

#### 1. TROGLODYTES.

Troglodytes, Vieill. Ois. d'Amer. Septr. ii. p. 52 (1807). Anorthura, Rennie, Mont. Orn. Dict. p. 6 (1831). Thriothorus, Vieill. Analyse, &c., p. 45 (1816).

#### a. Troglodytes.

1. TROGLODYTES PARVULUS. The Common Wren. Motacilla troglodytes, Linn. S. N. i. p. 337. Sylvia troglodytes, Lath. Ind. Orn. ii. p. 547; Temm. Man. d'Orn. 1815, p. 127. Troglodytes parvulus, Koch, Baier. Zool. i. p. 161; Naum. Vög. Deuts. (1822) iii. p. 725, t. 83, f. 4; Keys. & Bl. Wirbelth. Eur. p. 47; G. R. Gray, Gen. of B. ii. p. 158. Troglodytes europæus, Cuv.; Leach, Syst. Cat. Mam. & B. B. M. p. 25; Jenyns, Man. B. Vert. An. p. 153; Eyton, Cat. Brit. B. p. 14; Pr. Bonap. Geogr. Comp. List of B. p. 11. Troglodytes vulgaris, Flem. Brit. An. p. 73. Troglodytes regulus, Meyer. Troglodytes troglodytes (Cuv.), Schleg. Rev. Crit. des Ois. d'Eur. p. 44. Troglodytes punctatus (Koch), Boie, Isis, 1822, p. 551. Troglodytes domesticus, Brehm, Vog. Deuts. p. 454. Troglodytes sylvestris, Brehm, Vog. Deuts. p. 455, t. xxiii. f. 6. Anorthura communis, Renn. Mont. Orn. Dict. p. 570. Anorthura troglodytes, Macgill. Hist. Brit. B. iii. p. 15. The Wren, Bew. Brit. B. (1797) i. p. 227, fig.; Penn. Brit. Zool. (1812) p. 516; Yarr. Brit. B. 2 edit. ii. p. 169. Common Wren, Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 196. a. Devonshire. Male. From Col. Montagu's collection. b. Devonshire. Female. From Col. Montagu's collection. c. Devonshire. Albino variety. d, e. Cambridgeshire. Presented by Mr. J. Baker. f, g. Cambridgeshire. Young. Presented by Mr. J. Baker. h. Sternum. England. Presented by John Ray, Esq.

i. Skull. England. Presented by John Ray, Esq.

## Tribe III. DENTIROSTRES.

Passeres, pt. Linn. (1735), Mehr. (1752).

Picæ, pt. Mæhr. (1752).

Accipitres, pt. Linn. (1760).

Plumipedes, pt. Schaff. (1774).

Fissipedes anisodactyles-Conico-convexirostres, pt.-F. a. conicosubulirostres, pt. Schaff. (1774).

Anomalipedes, pt. Schaff. (1774).

Scutipedes, pt.—Negliges, pt.—Chanteurs, pt. Scop. (1777). Crenirostres—Conirostres, pt.—Subulirostres, Cuv. (1799—1800).

Gregarii, pt .- Canori -- Passerini, pt .- Sevrati, Illiger (1811).

Canori-Passerini-Coraces, pt. Temm. (1815).

Egithali - Pericalles, pt. - Textores, pt. - Baccivori, pt. - Myiotheres-Colluriones-Canori-Anerpontes, pt-Antriades, Vieill. (1816).

Dentirostres—Conirostres, pt. Cuv. (1817).

Omnivores, pt.—Insectivores—Granivores, pt. Temm. (1820).

Plereoramfi, pt. - Ifanti, pt. - Euristomi, pt. - Piezoramfi, pt. -Egitali-Rafioramti-Metrioramti, pt.-Collarioni, Ranz. (1823). Dentirostres—Conirostres, pt.—Scansores, pt. Vigors (1826).

Oscines, pt. Keys. & Bl. (1840).

Excurtrices, pt.—Cantatrices, Macgill. (1840).

Oscines-Clamatores, pt. Cabanis (1847).

## FAM. I. LUSCINIDÆ.

## i. Luscininæ.

## 1. CALAMODYTA.

Calamodyta, Mey. & Wolf. (1815).

Acrocephalus, Naum. Vögel. alte Aung. Nachtr. (1819).

Calamoherpe, Boie, Isis (1822), p. 972.

Salicaria, Selby, Brit. Orn. (1833).

Dumeticola, Blyth, Journ. A. S. B. (1845) p. 584.

Agrobates, Jerd. Madr. Journ. Lit. Sci. (1839).

Locustella, Kaup, Naturl. Syst. der Eur. Thier. p. 115 (1829). Calamodus, Kaup, Naturl. Syst. der Eur. Thier. p. 117 (1829).

Alsens, Kaup, Naturl. Syst. p. 108 (1829).

Cettia, Pr. Bonap. Geogr. Comp. List of B. p. 11.

Pseudo-Juscinia, Pr. Bonap. Geogr. Comp. List of B. p. 12 (1838).

Lusciniopsis, Pr. Bonap. Fauna Italica, p. (1842). Iduna, Keys. & Bl. Wirbelth. Eur. p. 58 (1840). Tribura, Hodgs. Proc. Z. S. (1845) p. Lusciniola, G. R. Gray, List of Gen. of B. i. p. 28 (1841). Hydrocopsichus, Kaup, Naturl. Syst. p. 121 (1829). Sibilatrix, Macgill. Hist. Brit. B. ii. p. 399 (1839). Potamodus, Kaup, Naturl. Syst. der Eur. Thier. p. 123 (1829).

#### a. Locustella.

## 1. CALAMODYTA LOCUSTELLA. The Grasshopper Warbler.

Calamodyta locustella, G. R. Gray, Gen. of B. i. p. 172. Sylvia locustella, Lath. Ind. Orn. ii. p. 515; Temm. Man. d'Orn. 1815, p. 129; Leach, Syst. Cat. Mam. & B. B. M. p. 23; Jenyns, Man. B. Vert. An. p. 106; Naum. Vog. Deuts. (1822) iii. p. 701, t. 83, f. 2. Motacilla nævia, Bodd, Table des Pl. Enl. d'Aubent. p. 35. Curruca locustella, Steph. Gen. Zool. xiii. p. 213; Flem. Brit. An. p. 69; Swains. Classif. of B. ii. p. 241. Locustella avicula, Ray, Syn. p. 70. Locustella —, Kaup, Naturl. Syst. p. 115. Locustella Rayii, Gould, Pr. Bonap. Geogr. Comp. List of B. p. 12. Acrocephalus fluviatilis, Naum. Vog. (1819), p. 192, 202. Calamoherne locustella, Boie, Isis (1822), p. 552; Brehm, Vög. Deuts. p. 439. Calamoherpe tenuirostris, Brehm, Vog. Deuts. p. 440? Sibilatrix locustella, Macgill. Hist. Brit. B. ii. p. 399; Eyton, Cat. Brit. B. p. 11; Keys. & Bl. Wirbelth. Eur. p. 54; Schleg. Rev. Crit. des Ois. d'Eur. p. 28. Salicaria locustella, Selby, Brit. Orn. i. p. Muscipeta locustella, Koch, Baier. Zool. i. p. 166. Muscipeta olivacea, Koch, Baier. Zool. i. p. 167. Grasshopper Lark, Penn. Brit. Zool. (1766) i. p. 95, t. 9, f. 5. Grasshopper Warbler, Penn. Brit. Zool. (1812) i. p. 518; Selby, Brit. Orn. p. 166; Yarr. Brit. B. 2 edit. i. p. 215, fig. Pl. enl. 581, f. 3; Gould, B. of Eur. pl. 103; Lewin, Brit. B. iii. pl. 98. a. Wiltshire. Male. Presented by G. Montagu, Esq. b. Wiltshire. Female. From Col. Montagu's collection.

#### b. CALAMODUS.

2. CALADOMYTA PHRAGMITIS. The Sedge Warbler.

Calamodyta phragmitis, Pr. Bonap. Geogr. Comp. List of B. p. 12;

G. R. Gray, Gen. of B. i. p. 172.

Sylvia phragmitis, Bechst. Natury. Deuts. iii. p. 633; Temm. Man. a. Orn. 1815, p. 132; Jenyns, Man. B. Vert. An. p. 107; Naum. Vög. Deuts. (1822) ii. p. 648, t. 82, f. 1.

Motacilla schænobænus, Linn.

Motacilla salicaria, Linn. S. N. i. p. 330?

Sylvia salicaria, Lath. Ind. Orn. ii. p. 516; Leach, Syst. Cat. Mam.

& B. B. M. p. 23.

Curruca salicaria, Steph. Gen. Zool. xiii. p. 209; Flem. Brit. An. p. 69.

Calamoherpe phragmitis, Boie, Isis (1822), p. 552; Brehm, Vög. Deuts. p. 449; Macgill. Hist. Brit. B. ii. p. 390.

Calamoherpe tritici, Brehm, Vig. Deuts. p. 449.

Calamoherpe schwuobænus, Brehm, Vog. Deuts. p. 450.

Curruea phragmitis, Swains. Classif of B. ii. p. 241.

Calamodus phragmitis, Kaup, Naturl. Syst. p. 116.

Calamoherpe subphragmitis, Brehm, Vög. Deuts. p. 1014.

Acrocephalus phragmitis, Naum. Vog. (1819) p. 202.

Muscipeta phragmitis, Koch, Baier. Zool. i. p. 163.
Salicaria phragmitis, Selby, Brit. Orn. i. p. 201; Eyton, Cat. Brit.
B. p. 11; Keys. & Bl. Wirbelth. Eur. p. 54; Schleg. Rev. Crit.

des Ois, d'Eur. p. 28. Reed Fauvette, Bew. Brit. B. (1797) i. p. 215, fig.

Sedge Warbler, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 517; Selby, Brit. Orn. i. p. 169; Yarr. Brit. B. 2 edit. i. p. 289, fig.

Gould, B. of Eur. pl. 110.

a. England.

b. Wiltshire. Male. From Col. Montagu's collection.
c. Cambridgeshire. From Mr. J. Baker's collection.

d. Sternum. England. Presented by John Ray, Esq.

## c. Potamodus.

## 3. CALAMODYTA CETTI. Cetti's Warbler.

Sylvia Cetti, Marm. Mem. della Acad. de Torino, xxv. p. 254; Temm. Man. d'Orn. (1820) i. p. 194; Jenyns, Man. B. Vert. An. p. 107.

Sylvia sericea, Natt. Temm. Man. d'Orn. (1820) i. p. 197.

Calamoherpe Cetti, Boie, Isis (1822), p. 552. Potamodus Cetti, Kaup, Naturl. Syst. p. 123. Calamodyta Cetti, G. R. Gray, Gen. of B. i. p. 172.
Curruca Cetti, Steph. Gen. Zool. xiii. p. 209.
Cettia altisonans, Pr. Bonap. Geogr. Comp. List of B. p. 11.
Cettia sericea, Pr. Bonap. Geogr. Comp. List of B. p. 12.
Salicaria Cettii, Keys. & Bl. Wirbelth. Eur. p. 55; Schleg. Rev. Crit. des Ois. d'Eur. p. 29.
Sylvia platura, Vieill. Encyc. Méth. p. 466.

Sylvia fulvescens, Vieill. Faun. Franc. i. p. 208.

Pl. enl. 655, f. 2; Gould, B. of Eur. pl. 114, 115; Pr. Bonap. Faun. Ital. t. 29, f. 3.

## d. Pseudo-luscinia.

#### 4. CALAMODYTA LUSCINOIDES. Savi's Warbler.

Sylvia luscinoides, Savi, Ornit. Tosc. i. p. 270; Temm. Man. d'Orn.
iii. p. 119; G. R. Gray, Ann. Nat. Hist. vi. p. 155.
Salicaria luscinoides, Keys. & Bl. Wirbelth. Eur. p. 53; Schleg.

Rev. Crit. des Ois. d'Eur. p. 28.

Calamodyta luscinoides, G. R. Gray, Gen. of B. i. p. 172.

Pseudo-luscinia Savii, Pr. Bonap. Geogr. Comp. List of B. p. 12.
Savi's Warbler, Lubb. Fauna of Norfolk, p. 34; Yarr. Brit. B.
2 edit. i. p. 293, fig.

Gould, B. of Eur. pl. 104; Pr. Bonap. Faun. Ital. t. 30, f. 2.

a. Cambridgeshire. From Mr. J. Baker's collection.

## e. Calamoherpe.

## 5. CALAMODYTA STREPERA. The Reed Wren.

Sylvia arundinacea, Lath. Ind. Orn. ii. p. 510; Temm. Man. d'Orn.
 1815, p. 134; Leach, Syst. Cat. Mam. & B. B. M. p. 23; Jenyns,
 Man. B. Vert. An. p. 107; Naum. Vög. Deuts. (1822) iii. p. 614,
 t. 81, f. 2.

Motacilla arundinacea, Gmel. S. N. i. p. 992.

Sylvia strepera, Vieill. N. Dict. d'Hist. Nat. xi. p. 182.

Sylvia palustris, Bechst. Naturg. Deuts. iii. p. 639. Calamodyta strepera, G. R. Gray, Gen. of B. i. p. 172.

Curruca arundinacea, Steph. Gen. Zool. xiii. p. 209; Flem. Brit. An. p. 69; Swains. Classif. of B. ii. p. 241.

Calamoherpe arundinaceus, Boie, Isis (1822), p. 552; Brehm, Vög. Deuts. p. 444; Pr. Bonap. Geogr. Comp. List of B. p. 13; Macgill. Hist. Brit. B. iii. p. 395.

Calamoherpe arbustorum, Boie, Isis (1822), p. 552; Brehm, Vög.

Deuts. p. 443.

Calamoherpe alnorum, Brehm, Vög. Deuts. p. 443.

Salicaria arundinacea, Selby, Brit. Orn. i. p. ; Eyton, Cat. Brit. B. p. 11; Keys. & Bl. Wirbelth. Eur. p. 53; Schleg. Rev. Crit. des Ois. d'Eur. p. 27.

Acrocephalus arundinaceus, Naum. Vög. (1819) p. 201.

Muscipeta arundinacea, Koch, Baier. Zool. i. p. 165.

Reed Wren, Mont. Orn. Dict.; Penn. Brit. Zool. i. p. 520; Selby, Brit. Orn. i. p. 171; Yarr. Brit. B. 2 edit. i. p. 295, fig.

Gould, B. of Eur. pl. 109; Pr. Bonap. Faun. Italica, t. 29, f. 2.

a. England.

b. Wiltshire. Male. From Col. Montagu's collection.

c. Great Britain.

#### 2. LUSCINIA.

Luscinia, Linn. S. N. (1735). Curruca, Boie, Isis (1822), p. 55 (pt.) Philomela, Selby, Brit. Orn. Lusciola, Keys. and Bl. Wirbelth. Eur. p. 58 (1840).

## 1. LUSCINIA PHILOMELA. The Nightingale.

Motacilla luscinia, Linn. S. N. i. p. 328.

Sylvia Iuscinia, Lath. Ind. Orn. ii. p. 506; Temm. Man. d'Orn.
 1815, p. 105; Leach, Syst. Cat. Mam. & B. B. M. p. 23; Jenyns,
 Man. B. Vert. An. p. 107; Naum. Vög. Deuts. (1822) ii. p. 373,
 t. 74, f. 2.

Curruca luscinia, Koch, Baier. Zool. i. p. 154; Boie, Isis (1822), p. 553; Steph. Gen. Zool. xiii. p. 208; Flem. Brit. An. p. 69. Philomela luscinia, Eyton, Cat. Brit. B. p. 11; Macgill. Hist.

Brit. B. ii. p. 321; Swains. Classif. of B. ii. p. 240.

Luscinia philomela, Pr. Bonap, Geogr. Comp. List of B. p. 15; G. R. Gray, Gen. of B. i. p. 173.

Luscinia megarhynchos, Brehm, Vog. Deuts. p. 356.

Luscinia media, Brehm, Vög. Deuts. p. 357. Luscinia Okenii, Brehm, Vög. Deuts. p. 357.

Luscinia peregrina, Brehm, Vog. Deuts. p. 358, t. xxi. f. 2.

Lusciola Iuscinia, Keys. & Bl. Wirbelth. Eur. p. 58; Schleg. Rev. Crit. des Ois. d'Eur. p. 31.

The Nightingale, Bew. Brit. B. i. p. 199; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 494; Selby, Brit. Orn. i. p. 172; Yarr. Brit. B. 2 edit. i. p. 302, fig.

Pl. ent. 615; Gould, B. of Eur. pl. 116.

a. Bayswater. Presented by J. F. Stephens, Esq.

b. Cambridgeshire. Chicks. Presented by Mr. J. Baker.

c. England. From Mr. Gould's collection.

d. Cambridgeshire. Young. From Mr. J. Baker's collection.

#### 3. SYLVIA.

Sylvia, Lath. Ind. Orn. (1790). Thamnodus, Kaup, Naturl. Syst. der Eur. Thier. p. 110 (1829). Staparola, Pr. Bonap. Faun. Ital. p. Pyrophthalma, Pr. Bonap. Faun. Ital. p. Melizophilus, Leach, Syst. Cat. Mam. & B. B. M. p. 15 (1816). Erythroleuca, Kaup, Naturl. Syst. p. 153 (1829). Monachus, Kaup, Naturl. Syst. p. 33 (1829). Epilais, Kaup, Naturl. Syst. p. 145 (1829). Adornis, G. R. Gray, List of Gen. of B. p. 29 (1841). Adophoneus, Kaup, Naturl. Syst. p. 28 (1829). Nisoria, Pr. Bonap. Geogr. Comp. List of B. p. 15 (1838). Phyllopneuste, Mey. & Wolf. (1815). Asilus, Bechst. (1802). Hippolais, Brehm, Isis (1828), p. 1283. Asilus, Mahring, Gen. Av. p. 44 (1752). Phylloscopus, Boie, Isis (1826), p. 972. Sibilatrix, Kaup, Naturl. Syst. der Eur. Thier. p. 98 (1829). Chloropeta, Smith, Ill. S. Afr. Zool. Birds, pl. Neornis, Hodgs. Gray's Zool. Misc. (1844) p. 82.

## a. Melizophilus.

## 1. Sylva undata. The Dartford Warbler.

Motacilla undata, Bodd. Table des Pl. enl. d'Aubent. p. 40. Motacilla provincialis, Gmel. S. N. i. p. 958; Temm. Man. d'Orn. i. p. 211 (1820).

Sylvia dartfordiensis, Lath. Ind. Orn. ii. p.

Sylvia ferruginea, Vieill. Fauna franc. p. 218, t. 98, f. 2, 3.

Sylvia undata, G. R. Gray, Gen. of B. i. p. 174.

Melizophilus provincialis, Jenyns, Man. B. Vert. An. p. 112; Pr. Bonap. Geogr. Comp. List. of B. p. 14.

Curruca provincialis, Boie, Isis (1822), p. 553; Macgill. Hist. Brit. B. ii. p. 383; Eyton, Cat. Brit. B. p. 12; Flem. Brit. An. p. 70. Melzophilus dartfordiensis, Leach, Syst. Cat. Mam. & B. B. M.

p. 25.

Sylvia provincialis, Keys. & Bl. Wirbelth. Eur. p. 57; Schleg. Rev. Crit. des Ois. d'Eur. p. 24. Thamnodus provincialis, Kaup, Naturl. Syst. p. 109.

Dartford Warbler, Bew. Brit. B. (1797) i. p. 203, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 530, pl. lxiii.; Selby,

Brit. Orn. i. p. 180; Yarr. Brit. B. 2 edit. i. p. 340, fig.

Gould, B. of Eur. pl. 129; Pl. enl. 655, f. 1.

a. Devonshire. Female. From Col. Montagu's collection.

b. Kent. Male. From Col. Montagu's collection. c. Kent. Young. From Col. Montagu's collection.

#### b. SYLVIA.

#### 2. SYLVIA CURRUCA. The Lesser Whitethroat.

Motacilla curruca, Gmel. S. N. i. p. 954?

Sylvia curruca, Lath. Ind. Orn. ii. p. 509; Temm. Man. d'Orn. 1815, i. p. 113; Jenyns, Man. B. Vert. An. p. 109; Naum. Vög. Deuts. (1822) ii. p. 451, t. 77, f. 1; Pr. Bonap. Geogr. Comp. List of B. p. 14; Keys. & Bl. Wirbelth. Eur. p. 57; Schleg. Rev. Crit. des Ois. d'Eur. p. 24; G. R. Gray, Gen. of B. i. p. 174.

Motacilla garrula, Retz. Linn. Faun. Suec. p. 254.

Sylvia garrula, Bechst. Naturg. Deuts. iii. p. 540; Maegill. Hist. Brit. B. ii. p. 357.

Sylvia leucopogon, Heckel.

Motacilla sylvia, Pall. Zoogr. i. p. 488.

Curruca garrula, Koch, Baier, Zool. i. p. ; Steph. Gen. Zool. xiii. p. 211; Brehm, Vög. Deuts. p. 422; Eyton, Cat. Brit. B. p. 12; Leach, Syst. Cat. Mam. & B. B. M. p. 23.

Sylvia sylviella, Lath. Ind. Orn. ii. p. 515. Curruca sylviella, Flem. Brit. An. p. 71.

Curruca dumetorum, Brehm, Vog. Deuts. p. 422.

Curruca molaria, Brehm, Vog. Deuts. p. 422.

Motacilla dumetorum, Gmel. P Sylvia dumetorum, Lath.?

Lesser Whitethrout, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 529; Yarr. Brit. B. 2 edit. i. p. 320, fig.

Pl. enl. 580, f. 3? Gould, B. of Eur. pl. 125, f. 2.

a, b. Londou. Presented by W. Yarrell, Esq.

c. Cambridgeshire. From Mr. J. Baker's collection.

d. Cambridgeshire. Young. From Mr. J. Baker's collection.

## c. STRAPAROLA.

## 3. SYLVIA CINEREA. The Whitethroat Warbler,

Motacilla sylvia, Linn. S. N. i. p. 330.

Sylvia cinerea, Lath. Ind. Orn. ii. p. 514; Temm. Man. d'Orn.

1815, p. 113; Leach, Syst. Cat. Mam. & B. B. M. p. 23; Jenyns, Man. B. Vert. An. p. 109; Naum. Vog. Deuts. (1822), ii. p. 464, t. 78, f. 1, 2; Macgill. Hist. Brit. B. ii. p. 350; Pr. Bonap Geogr. Comp. List of B. p. 14; Keys. and Bl. Wirbelth. Eur. p. 57; Schleg. Rev. Crit. des Ois. d'Eur. p. 23; G. R. Gray, Gen. of B. i. p. 174.

Sylvia fruticeti, Bechst. Naturg. Deuts. iii. p. 530; Vieill. Encyc.

Méth. p. 423.

Sylvia cineraria, Bechst. Naturg. Deuts. iii. p. 534.

Curruca cinerea, Koch, Baier. Zool. i. p. 157; Brehm, Vog. Deuts. p. 419; Eyton, Cat. Brit. B. p. 12; Swains. Classif. of B. ii. p. 241.

Curruca sylvia, Steph. Gen. Zool. xiii. p. 210; Flem. Brit. An. p.

Curruca cineraria, Brehm, Vög. Deuts. p. 420.

Curruca fruticeti, Brehm, Vog. Deuts. p. 420.

Curruca caniceps, Brehm, Vog. Deuts. p. 421.
The Whitethroat, Bew. Brit. B. (1797) i. p. 219, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 528; Selby. Brit. Orn. i. p. 178.

The Common Whitethroat, Yarr. Brit. B. 2 edit. i. p. 316, fig.

Pl. enl. 579, f. 3, 581, f. 1; Gould, B. of Eur. pl. 125, f. 1.

a. Great Britain.

b, c. Great Britain. From Mr. J. Clarke's collection.

d. Devonshire. Male. From Col. Montagu's collection. e. Bishop Wearmouth. Presented by W. Yarrell, Esq.

f-i. Cambridgeshire. From Mr. J. Baker's collection.

j. Cambridgeshire. Chicks. From Mr. J. Baker's collection.

## d. Monachus.

## 4. Sylvia atricapilla. The Black-cap Warbler.

Motacilla atricapilla, Linn. S. N. i. p. 332.

Sylvia atricapilla, Lath. Ind. Orn. ii. p. 508; Temm. Man. d'Orn. 1815, p. 109; Jenyns, Man. B. Vert. An. p. 108; Naum. Vög. Deuts. (1822) ii. p. 492, t. 77, f. 2, 3; Macgill. Hist. Brit. B. ii. p. 339; Keys. & Bl. Wirbelth. Eur. p. 57; Schleg. Rev. Crit. des Ois. d'Eur. p. 25; G. R. Gray, Gen. of B. i. p. 174. Sylvia ruticapilla, Sandb.

Curruca atricapilla, Koch, Baier. Zool. i. p. 155; Leach, Syst. Cat. Mam. & B. B. M. p. 25; Flem. Brit. An. p. 70; Brehm, Vog. Deuts. p. 418; Eyton, Cat. Brit. B. p. 12; Pr. Bonap. Geogr.

Comp. List of B. p. 14.

Curruca nigricapilla, Brehm, Vög. Deuts. p. 417. Curruca pileata, Brehm, Vög. Deuts. p. 418. Monachus atricapillus, Kaup. Naturl. Syst. p. 33. Philomela atricapilla, Swains, Classif. of B. ii. p. 240.

The Black-cap, Bew. Brit. B. (1797) i, p. 217, fig.; Mont. Orn.

Dict.

Black-cap Warbler, Penn. Brit. Zool. (1812) i. p. 505; Selby,
Brit. Orn. i. p. 174; Yarr. Brit. B. 2 edit. i. p. 307, fig.

Pl. enl. 580, f. 1, 2; Gould, B. of Eur. pl. 120.

a. Devonshire. Male. From Col. Montagu's collection.

b. England. Male.

c. Wiltshire. Female. From Col. Montagu's collection.

d. Cambridgeshire. Male. From Mr. J. Baker's collection.

e. Sternum. England. Presented by T. Ingall, Esq.

### e. EPILAIS.

### 5. SYLVIA HORTENSIS. The Garden Warbler.

Motacilla borin, Bodd. Table des Pl. enl. d'Aubent. p. 35.

Motacilla hortensis, Gmel. S. N. i. p. 955.

Sylvia hortensis, Lath. Ind. Orn. ii. p. 507; Bechst. Naturg. Deuts. iii. p. 524; Temm. Man. d'Orn. 1815, p. 111; Leach, Syst. Cat. Mam. & B. B. M. p. 23; Naum. Vög. Deuts. (1822) ii. p. 478, t. 78, f. 3; Jenyns, Man. B. Vert. An. p. 108; Macgill. Hist. Brit. B. iii. p. 345; Keys. & Bl. Wirbelth. Eur. p. 57; Schleg. Rev. Crit. des Ois. d'Eur. p. 25; G. R. Gray, Gen. of B. i. p. 174.

Curruca hortensis, Koch, Baier. Zool. i. p. 155; Flem. Brit. An. p. 70; Brehm, Vög. Deuts. p. 415; Eyton, Cat. Brit. B. p. 12; Pr. Bonap. Geogr. Comp. List of B. 14; Swains. Classif. of B.

ii. p. 241.

Sylvia ædonia, Vieill. Faun. franc. p. 221, t. 99, f. 3. Curruca brachyrhyncha, Brehm, Vög. Deuts. p. 416. Curruca grisea, Brehm, Vög. Deuts. p. 416, t. xxiii. f. 2.

Epilais hortensis, Kaup, Naturl. Syst. p. 145.

Adornis hortensis, G. R. Gray, List of Gen. of B. (1841) p. 29.

The Lesser Fauvette, Passerine Wurbler, Bew. Brit. B. (1797) i. p. 212, fig.

The Fauvette, Pettichaps, Bew. Brit. B. (1797) i. p. 209. Greater Pettichaps, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) j.

p. 506; Selby, Brit. Orn. i. p. 176. The Garden Warbler, Yarr. Brit. B. 2 edit. i. p. 312, fig.

Pl. enl. 579, f. 2; Gould, B. of Eur. pl. 121.

- a. Devonshire. Male. From Col. Montagu's collection.
- b. Devonshire. Female. From Col. Montagu's collection.
- c. Saffron Walden.

#### 6. PSYLVIA ORPHEA.

Sylvia orphea, Temm. Man. d'Orn, i. p. 198? Milner, Zoologist, 1849, p. 2588.
Sylvia grisea, Vieill.

Pl. enl. 579, f. 1?

#### f. Phylloscopus.

#### 7. SYLVIA RUFA. The Chiff-chaff.

Sylvia rufa, Lath. Ind. Orn. ii. p. 516; Temm. Man. d'Orn. 1815, p. 125; Naum. Vög. Deuts. (1823) iii. p. 581, t. 80, f. 4; G. R. Gray, Gen. of B. i. p. 174.

Sylvia hippolais, Penn. Brit. Zool. (1812) i. p. 508; Leach, Syst. Cat. Mam. & B. B. M. p. 24; Jenyns, Man. B. Vert. An. p. 111.

Regulus hippolais, Flem. Brit. An. p. 72.

Phyllopneuste rufa, Pr. Bonap. Geogr. Comp. List of B. p. 13.

Ficedula rufa, Koch, Baier. Zool. i. p. 160; Keys. & Bl. Wirbelth. Eur. p. 56; Schleg. Rev. Crit. des Ois. d'Eur. p. 26.

Phylloscopus rufus, Kaup, Naturl. Syst. p. 94.

Regulus hippolais, Cuv. Reg. An. (1817) i. p. 369; Steph. Gen. Zool. xiii. p. 231?

Sylvia collybita, Vieill. Faun. Franc. p. 214, t. 97, f. 1. Phyllopneuste hippolais, Macgill. Hist. Brit. B. ii. p. 379.

Sylvia abietina, Nils.

Sylvicola rufa, Eyton, Cat. Brit. B. p. 14.

Least Willow Wren, Bew. Brit. B. (1797) i. p. 223.

Lesser Pettichaps, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 508; Selby, Brit. Orn. i. p. 186.

The Chiff-chaff, Yarr. Brit. B. 2 edit. i. p. 335, fig.

Gould, B. of Eur. pl. 131, f. 2.

a. Devonshire. From Col. Montagu's collection.

b. Epping. Presented by H. Doubleday, Esq.

c. Sternum. England. Presented by T. Ingall, Esq.

d. Sternum. England. Presented by John Ray, Esq.

e. Skull. England. Presented by John Ray, Esq.

## 8. Sylvia trochilus. The Willow Warbler.

Motacilla trochilus, Linn. S. N. i. p. 338. Sylvia trochilus, Lath. Ind. Orn. ii. p. 550; Temm. Man. d'Orn. 1815, p. 124; Leuch, Syst. Cat. Mam. & B. B. M. p. 24; Naum. Vög Deuts. (1823) ii. p. 568, t. 80, f. 3; Jenyns, M. Brit. Vert. An. p. 111.; Temm. Man. d'Orn. (1820) i. p. 224; G. R. Gray, Gen. of B. i. p. 174.

Motacilla acredula, Linn. S. N. i. p. 338.

Sylvia fitis, Bechst. Naturg. Deuts. iii. p. 643.

Regulus trochilus, Cuv. Reg. An. (1817), i. p. 369; Steph. Gen.

Zool. xiii. p. 231; Flem. Brit. An. p. 72.

Phyllopneuste trochilus, Brehm, Vog. Deuts. p. 429; Macgill. Hist. Brit. B. ii. p. 371; Pr. Bonap. Geogr. Comp. List of B. p. 13.

Phyllopneuste acredula, Brehm, Vog. Deuts. p. 428.

Ficedula trochilus, Keys. & Bl. Wirbelth. Eur. p. 56; Schleg. Rev. Crit. des Ois. d'Eur. p. 25.

Sylvia flaviventris, Vieill. N. Dict. d'Hist. Nat. xi. p. 241.

Ficedula fitis, Koch, Baier. Zool. i. p. 159.

Phyllopneuste fitis, Brehm, Vog. Dents. p. 427. Phyllopneuste arborea, Brehm, Vög. Deuts. p. 427. Phylloscopus trochilus, Boie, Isis (1826), p. 972.

Sylvicola trochilus, Eyton, Cat. Brit. B. p. 13.

The Willow Wren, Bew. Brit. B. (1797) i. p. 222, fig.

Yellow Wren, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 511; Selby, Brit. Orn. i. p. 189.

The Willow Warbler, Yarr. Brit. B. 2 edit. i. p. 329, fig. Pl. enl. 651, f. 1; Gould, B. of Eur. pl. 131, f. 1.

a. Devonshire. Female. From Col. Montagu's collection.

b. Great Britain. c. Great Britain.

d. Wiltshire. Male, variety. From Col. Montagu's collection.

e, f. Saffron Walden. From Mr. J. Clarke's collection. g, h. Cambridgeshire. Chicks. Presented by Mr. J. Baker.

## g. SIBILATRIX.

## 8. SYLVIA SIBILATRIX. The Wood Warbler.

Sylvia sibilatrix, Bechst. Naturg. Deuts. iii. p. 561; Temm. Man. d'Orn. 1815, p. 123; Naum. Vög. Deuts. (1823) iii. p. 556, t. 80, f. 2; Jenyns, Man. B. Vert. An. p. 110; G. R. Gray, Gen. of B. i. p. 174.

Sylvia sylvicola, Lath. Ind. Ornith. Supp. p. ; Linn. Trans. iv. p. 35; Leach, Syst. Cat. Mam. & B. B. M. p. 24.

Ficedula sibilatrix, Koch, Baier. Zonl. i. p. 159; Keys. & Bl. Wirbelth. Eur. p. 55; Schleg. Rev. Crit. des Ois. d'Eur. p. 26.

Curruca sibilatrix, Flem. Brit. An. p. 70.

Phyllopnouste sibilatrix, Boie, Brehm, Vög. Deuts. p. 426; Pr. Bonap. Geogr. Comp. List of B. p. 13.

Phyllopneuste megaryhnchos, Brehm, Vög. Deuts. p. 425.

Phyllopneuste sylvicola, Brehm, Vög. Deuts. p. 426; Macgill. Hist. Brit. B. ii. p. 364.

Sibilatrix — Kaup, Naturl. Syst. p. 98.

Regulus? sylvicolus, Steph. Gen. Zool. xiii. p. 231.

Sylvicola sibilatrix, Eyton, Cat. Brit. B. p. 14.

The Yellow Willow Wren, Bew. Brit. B. (1797) i. p. 220.

Wood Wren, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 512; Selby, Brit. Orn. i. p. 188.

The Wood Warbler, Yarr. Brit. B. 2 edit. i. p. 324, fig.

Pl. col. 245, f. 3; Gould, B. of Eur. pl. 131, f. 3; Pr. Bonap. Fauna Italica, t. 27, f. 1.

- a. Carmarthenshire. Male. From Col. Montagu's collection.
- b. Carmarthenshire. Female. From Col. Montagu's collection.
- c. Great Britain.

#### 4. REGULUS.

Regulus, Cuv. Anat. Comp. i. Tab. Sec. Cl. des Ois. (1799—1800). Reguloides, Blyth (1847). Abrornis, Hodgs. Gray, Zool. Misc. p. 82 (1844). Horornis, Hodgs. Gray, Zool. Misc. p. 82 (1844).

### a. REGULUS.

1. REGULUS CRISTATUS. The Golden-crested Regulus.

Motacilla regulus, Linn. S. N.

Sylvia regulus, Lath. Ind. Orn. ii. p. 548; Temm. Man. d'Orn. 1815, p. 126.

Regulus cristatus (Ray), Koch, Baier. Zool. i. p. 199; Flem. Brit. An. p. 72; Pr. Bonap. Geogr. Comp. List of B. p. 19; Keys. & Bl. Wirbelth. Eur. p. 55; Schleg. Rev. Crit. des Ois. d'Eur. p. 44; G. R. Gray, Gen. of B. i. p. 175.

Regulus auricapillus, Selby, Brit. Orn. i. p. 192; Jenyns, Man. B. Vert. An. p. 113; Macgill. Hist. Brit. B. ii. p. 408; Eyton, Cat. Brit. B. p. 13.

Regulus flavicapillus, Naum. Vög. Deuts. (1823) iii. p. 968, t. 93, f. 1, 2, 3.

Regulus vulgaris, Leach, Syst. Cat. Mam. & B. B. M. p. 25.

Regulus septentrionalis, Brehm, Vög. Deuts. p. 479. Regulus crococephalus, Brehm, Vög. Deuts. 480.

Regulus chrysocephalus, Brehm, Vög. Deuts. 481.

The Golden-crested Wren, Bew. Brit. B. (1797) i. p. 224, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 514.

Golden-crested Regulus, Selby, Brit. Orn. i. p. 192; Yarr. Brit. B. 2 edit. i. p. 346, fig.

Gould, B. of Eur. pl. 148, f. 1.

a. Devonshire. From Col. Montagu's collection.

b. Middlesex. Presented by E. Churton, Esq.c. Devonshire. From Col. Montagu's collection.

d. Devonshire. Variety. From Col. Montagu's collection.
 e. Saffron Walden. Male. From Mr. J. Clarke's collection.

f. Saffron Walden. Female. From Mr. J. Clarke's collection.

g. Sternum. England, Presented by T. Ingall, Esq.

## 2. REGULUS IGNICAPILLUS. The Fire-crested Regulus.

Sylvia ignicapillus, Brehm; Temm. Man. d'Orn. (1820) i. p. 231. Regulus pyrocephalus, Brehm, Beitr. ii. p. 230; Vög. Deuts. p. 483.

Regulus ignicapillus, Naum. Vög. Deuts. (1823) iii. p. 983, t. 93, f. 4, 5, 6; Jenyns, Man. B. Vert. An. p. 113; Macgill. Hist. Brit. B. iii. p. 416; Eyton, Cat. Brit. B. p. 13; Pr. Bonap. Geogr. Comp. List of B. p. 19; Keys. & Bl. Wirbelth. Eur. p. 55; Schleg. Rev. Crit. des Ois. d'Eur. p. 44; G. R. Gray, Gen. of B. i. p. 175.

Regulus Nilsonii, Brehm, Vog. Deuts. p. 482?

Regulus brachyrhynchus, Brehm, Vög. Deuts. p. 483?

The Fire-crested Wren, Eyton, Hist. R. Brit. B. p. 13. The Fire-crested Regulus, Yarr. Brit. B. 2 edit. i. p. 351, fig.

Pl. enl. 651, f. 3; Gould, B. of Eur. pl. 148, f. 2.

(Cambridgeshire, Sussex and Durham, &c.)

## b. REGULOÏDES.

## 3. REGULUS PRORECULUS. The Dalmatian Regulus.

Regulus modestus, Gould, B. of Eur. pl. 149; Temm. Man. d'Orn. iv. p. 618; Pr. Bonap. Geogr. Comp. List of B. p. 19; Macgill. Man. N. H. Ornith. i. p. 152.

Motacilla proregulus, Pall. Zoogr. i. p. 499.

Regulus proregulus, Keys. & Bl. Wirbelth. Eur. p. 55; G. R. Gray, Gen. of B. i. p. 175.

Phylloscopus modestus, Blyth, Ann. Nat. Hist. xiii. p. 179. Dalmatian Regulus, Yarr. Brit. B. 2 edit. i. p. 355, fig.

Gould, B. of Eur. pl. 149.

(Northumberland)

### ii. ERYTHACINÆ.

#### 1. SAXICOLA.

Saxicola, Bechst. Orn. Taschenb. i. p. (1802). Vitiflora, Leach, Syst. Cat. Mam. & B. B. M. p. 21 (1816). Enanthe, Vieill. Analyse, p. 43 (1816). Campicola, Swains. Zool. Journ. iii. p. 171 (1827).

#### a. SAXICOLA.

#### 1. SAXICOLA GNANTHE. The Wheatear.

Motacilla cenanthe, Linn. S. N. i. p. 332.

Sylvia cenanthe, Lath. Ind. Orn. ii. p. 529; Temm. Man. d'Orn.

1815, p. 135.

Motacilla vitiflora, Pall. Zoogr. i. p. 472. Saxicola cenanthe, Bechst. Orn. Taschenb. i. p. 217; Naum, Vög.

Deuts. (1823) iii. p. 863, t. 89, f. 1, 2; Flem. Brit. An. p. 67; Jenyns, Man. B. Vert. An. p. 119; Macgill. Hist. Brit. B. ii. p. 289; Eyton, Cat. Brit. B. p. 10; Keys. & Bl. Wirbelth. Eur. p. 59; Schleg. Rev. Crit. des Ois. d'Eur. p. 33; G. R. Gray. Gen. of B. i. p. 178.

Vitifiora conanthe, Leach, Syst. Cat. Mam. & B. B. M. p. 21; Boie, Isis (1822), p. 552; Brehm, Vög. Deuts. p. 404, t. xxii. f. 5; Pr. Bonap. Geogr. Comp. List of B. p. 16.

Vitiflora septentrionalis, Brehm, Vög. Deuts. p. 403.

Vitiflora grisea, Brehm, Vög. Deuts. p. 405.

Vitiflora cinerea, Brehm, Vog. Deuts. p. 405.

The White-rump, Bew. Brit. B. (1797) i. p. 229.

Wheatear, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 521; Selby, Brit. Orn. i. p. 199; Yarr. Brit. B. 2 edit. i. p. 276, fig. Pl. enl. 554, f. 1, 2.

- a. Brighton. Presented by J. G. Children, Esq.
- b. Cambridgeshire. From Mr. J. Baker's collection.
  c. Sternum. England. Presented by T. Ingall, Esq.
- d. Sternum. England. Presented by John Ray, Esq.
- e. Skull. England. Presented by John Ray, Esq.

#### 2. PRATINCOLA.

Pratincola, Koch, Baier. Zool. i. p. (1816). Fruticicola, Macgill. Hist. Brit. B. ii. p. 271 (1839). Rubetra, G. R. Gray, List of Gen. of B. (1840) p. 22. Praticola, Kaup, Naturl. Syst. (1829) p. 114.

### 1. PRATINCOLA RUBETRA. The Whinchat.

Motacilla rubetra, Linn. S. N. i, p. 332.

Sylvia rubetra, Lath. Ind. Orn. ii. p. 525; Temm. Man. d'Orn. 1815, p. 139.

Curruca rubetra, Leach, Syst. Cat. Mam. & B. B. M. p. 24.

Saxicola robetra, Bechst. Orn. Taschenb. i. p. 218; Naum. Vög. Deuts. (1823) iii. p. 903, t. 89, f. 3, 4; Flem. Brit. An. p. 67; Jenyns, Man. B. Vert. An. p. 120; Brehm, Vög. Deuts. p. 409; Eylon, Cat. Brit. B. p. 10; Pr. Bonap. Geogr. Comp. List of B. p. 16; Schleg. Rev. Crit. des Ois. d'Eur. p. 34.

Rubetra major, Briss.; G. R. Gray, List of Gen. (1840), p. 22. Pratincola rubetra, Koch, Baier, Zool. i. p. 191; G. R. Gray, Gen.

of B. i. p. 179.

Saxicola pratorum, Brehm, Vog. Deuts. p. 407.

Saxicola septentrionalis, Brehm, Vog. Deuts. p. 408, t. xxi. f. 3.

Saxicola crampes, Brehm, Vog. Deuts. p. 409.

Fruticicola rubetra, Macgill. Hist. Brit. B. ii. p. 273.

Saxicola (Pratincola) rubetra, Keys. § Bl. Wirhelth. Eur. p. 59.
The Whinehat, Bew. Brit. B. (1797) i. p. 231, fig.; Mont. Orn.
Dict.; Penn. Brit. Zool. (1812) i. p. 525; Selby, Brit. Orn. i.
p. 201; Yarr. Brit. B. 2 edit. i. p. 272, fig.

Pl. enl. 678, f. 2; Gould, B. of Eur. pl. 93.

a. Somerset. From Col. Montagu's collection.
b. Sternum. England. Presented by T. Ingall, Esq.

## 2. PRATINCOLA RUBICOLA. The Stonechat.

Motacilla rubicola, Linn. S. N. i. p. 332.

Sylvia rubicola, Lath. Ind. Orn. ii. p. 523; Temm. Man. d'Orn. 1815, p. 140.

Curruca rubicola, Leach, Syst. Cat. Mam. & B. B. M. p. 24.

Saxicola rubicola, Bechst. Orn. Taschenb. i. p. 220; Naum. Vög. Deuts. (1823) iii. p. 884, t. 90, f. 3—5; Flem. Brit. An. p. 68; Jenyns, Man. B. Vert. An. p. 121; Brehm, Vög. Deuts. p. 410; Eyton, Cat. Brit. B. p. 9; Pr. Bonap. Geogr. Comp. List of B. p. 16; Schleg. Rev. Crit. des Ois. d'Eur. p. 35.

Pratincola rubicola, Koch, Baier. Zool. i. p. 192; G. R. Gray, Gen.

of B. i. p. 179.

Saxicola fruticeti, Brehm, Vog. Deuts. p. 411.

Saxicola media, Brehm, Vog. Deuts. p. 411, t. xxiii. f. 1.

Saxicola tytis, Brehm, Vog. Deuts. p. 412.

Fruticicola rubicola, Macgill. Hist. Brit. B. ii. p. 279.

Saxicola (Pratincola) rubicola, Keys. & Bl. Wirbelth, Eur. p. 59.

The Stonechat, Bew. Brit. B. (1797) i. p. 233, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 526; Selby, Brit. Orn. i. p. 203; Yarr. Brit. B. 2 edit. i. p. 268, fig.

Pl. enl. 678, f. 2; Gould, B. of Eur. pl. 90, f. 3.

a, b. Devonshire. From Col. Montagu's collection.

c. Surrey. Young.

#### 3. RUTICILLA.

Ruticilla, Brehm, Isis (1828), p. 1280. Ficedula, Boie, Isis (1822), p. 553. Phænicura, Swains. Faun. Bor. Amer. ii. p. 489 (1831). Larvivora, Hodgs. Cinclidium, Blyth, Journ. A. S. Beng. (1842) p. 181.

#### 1. RUTICILLA PHÆNICUBA. The Redstart.

Motacilla phænicurus, Linn. S. N. i. p. 335.

Sylvia phænicurus, Lath. Ind. Orn. ii. p. 511; Temm. Man. d'Orn. 1815, p. 119; Leach, Syst. Cat. Mam. & B. B. M. p. 24; Naum. Vög. Deuts. (1823) iii. p. 510, t. 79, f. 1, 2; Flem. Brit. An. p. 68; Jenyns, Man. B. Vert. An. p. 104.

Saxicola phænicurus, Koch, Baier. Zool. i. p. 188.

Phænicura ruticilla, Swains. Classif. of B. ii. p. 240; Gould, B. of Eur.

Ruticilla sylvestris, Brehm, Vög. Deuts. p. 363, t. xxi. f. 4.

Ruticilla arborea, Brehm, Vög. Deuts. p. 363, t. xxi. 1. 4.

Ruticilla hortensis, Brehm, Vög. Deuts. p. 364.

Ruticilla phænicura, Pr. Bonap. Geogr. Comp. List. of B. p. 15; Macgill. Hist. Brit. B. iii. p. 305; G. R. Gray, Gen. of B. i. p. 180.

Lusciola (Ruticilla) phænicurus, Keys. & Bl. Wirbelth. Eur. p. 58. Ficedula phænicurus, Boie, Isis (1822), p. 553.

Phænicura muraria, Swains. Faun. Bor. Amer. ii. p. 489.

Phænicura albifrons, Bl.?

Ficedula rutacilla, Éyton, Cat. Brit. B. p. 10.

Lusciola phænicura, Schleg. Rev. Crit. des Ois. d'Eur. p. 31.

The Redstart, Bew. Brit. B. (1797) i. p. 208, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 500; Selby, Brit. Orn. i. p. 184; Yarr. Brit. B. 2 edit. i. p. 259, fig.

Pl. enl. 351, f. 1,2; Gould, B. of Eur. pl. 95.

a. Great Britain. Male, adult.

b. Great Britain. Male, young.

c. Devonshire. Female. From Col. Montagu's collection.

d. Epping. Male, adult. Presented by Henry Doubleday, Esq. e. Saffron Walden. Very young. From Mr. J. Clarke's collection.

#### 2. RUTICILLA TITHYS. The Black Redtail.

Sylvia tithys, Scop. Ann. i. p. 157; Temm. Man. d'Orn. 1815, p. 117; Naum. Vög. Deuts. (1823) iii. p. 525, t. 79, f. 3, 4; Jenyns, Man. B. Vert. An. p. 105.

? Motacilla crythacus, Linn. S. N. i. p. 335.

? Motacilla gibraltariensis, Gmel. S. N. i. p. 987.

Saxicola tithys, Koch, Baier. Zool. i. p. 186.

Ruticilla tithys, Brehm, Vög. Deuts. p. 365; Macgill. Hist. Brit. B. ii. p. 311; Pr. Bonap. Geogr. Comp. List of B. p. 16; G. R. Gray, Gen. of B. i. p. 180.

Ruticilla atra, Brehm, Vog. Deuts. p. 365.

Ruticilla gibraltariensis, Brehm, Vog. Deuts. p. 366.

Phænicura tithys, Jard. & Selby, Ill. Orn. pl. 86, f. 1, 2.

Ficedula tithys, Bvie, Isis (1822), p. 553; Eyton, Rarer Brit. B. p. 7, and Eyton, Cat. Brit. B. p. 10.

Lusciola tithys, Schleg. Rev. Crit. des Ois. d'Eur. p. 31. Lusciola (Ruticilla) tithys, Keys. & Bl. Wirbelth. Eur. p. 59.

The Black Redstart, Eyton, Hist. R. Brit. B. p. 7. The Black Redtail, Yarr. Brit. B. 2 edit. i. p. 264, fig.

Gould, B. of Eur. pl. 96.

a. Wimbledon Common. From Mr. J. Baker's collection.

#### 4. ERYTHACUS.

Erythacus, Cuv. Anat. Comp. i. Tab. Sec. Cl. des Ois. (1790-1800). Erythaca, Swains. Faun. Bor. Amer. ii. p. 488 (1831). Dandalus, Boie, Isis (1826), p. 972. Rubecula, Brehm, Isis. (1828), p. 1280.

## 1. ERYTHACUS RUBECULA. The Red-breast.

Motacilla rubecula, Linn. S. N. i. p. 337. Sylvia rubecula, Lath. Ind. Orn. ii. p. 520; Temm. Man. d'Orn.

1815, p. 115; Naum. Vög. Deuts. (1822) ii. p. 397, t. 75, f. 1, 2; Flem. Brit. An. p. 68; Jenyns, Man. B. Vert. An. p. 103.

Erythacus rubecula, Macgill. Hist. Brit. B. ii. p. 263; G. R. Gray, Gen. of B. i. p. 182.

Dandalus pinetorum, Brehm, Vog. Deuts. p. 360.

Dandalus foliorum, Brehm, Vög. Deuts. p. 360.

Dandalus septentrionalis, Brehm, Vög. Deuts. p. 361, t. xxi. f. 3.

Dandalus rubecula, Boie, Isis (1826), p. 972; Kaup, Naturl. Syst. p. 188; Pr. Bonap. Geogr. Comp. List of B. p. 15.

Ficedula rubecula, Boie, Isis (1822), p. 553; Eyton, Cat. Brit. B. p. 10.

Erythaca rubecula, Swains. Fauna Bor. Amer. p. 488; Selby, Brit. Orn. i. p. 188

Lusciola (Erythacus) rubecula, Keys. & Bl. Wirbelth. Eur. p. 58.

Lusciola rubecula, Schleg. Rev. Crit. des Ois. d'Eur. p. 32. Curruca rubecula, Leach, Syst. Cat. Mam. & B. B. M. p. 25.

The Redbreast, Rew. Brit. B. (1797) i. p. 204; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 502; Selby, Brit. Orn. i. p. 180;

Yarr. Brit. B. 2 edit. i. p. 247, fig. Pl. enl. 361, f. 1; Gould, B. of Eur. pl. 98.

- a. Great Britain.
- b. Devonshire.

c. Cambridgeshire. Young. Presented by Mr. J. Baker.

d, e. Cambridgeshire. Very young. Presented by Mr. J. Baker.

f. Cambridgeshire. Young. From Mr. Baker's collection.

g. Sternum. England. Presented by T. Ingall, Esq.

#### 5. CYANECULA.

Cyanecula, Brehm, Isis (1828), p. 1280. Pandicilla, Blyth (1833). Calliope, Gould (1836).

## 1. CYANECULA SUECICA. The Blue-throated Warbler.

Motacilla suecica, Linn. S. N. i. p. 336.

Sylvia suecica, Lath. Ind. Orn. ii. p. 521; Temm. Man. d'Orn. 1815,
 p. 116; Naum. Vög. Deuts. (1822) ii. p. 414, t. 75, f. 345;
 Jenyns, Man. B. Vert. An. p. 104.

Phænicura suecica, Swains. Classif. of B. ii. p. 240.

Saxicola suecica, Koch, Baier. Zool. i. p. 189.

Ficedula suecica, Boie, Isis (1822), p. 553; Eyton, Cat. Brit. B. p. 10.

Sylvia cyanecula, Meyer & Wolf, Tasch. Deuts. Vög. i. p. 240.

Cyanecula succica, Brehm, Vög. Deuts. p. 350, t. xxi. f. 1; Pr. Bonap. Geogr. Comp. List of B. p. 15; G. R. Gray, Gen. of B. i. p. 182.

Cyanecula Wolfii, Brehm, Vög. Deuts. p. 352.

Cyanecula obscura, Brehm, Vög. Deuts. p. 353.

Cyanecula leucocyanea, Brehm, Vög. Deuts. p. 353.
Cyanecula orientalis, Brehm, Vög. Deuts. p. 351?
Ruticilla cyanecula, Macgill. Brit. B. ii. p. 300.
Lusciola (Cyanecula) suecica, Keys. & Bl. Wirbelth. Eur. p. 58.
Lusciola cyanecula, Schleg. Rev. Crit. des Ois. d'Eur. p. 32.
The Blue-throated Redstart, Eyton, Hist. R. Brit. B. p. 9, fig.
The Blue-throated Warbler, Yarr. Brit. B. 2 edit. i. p. 254, fig.
Pl. enl. 361, f. 2, 610, f. 1; Gould, B. of Eur. pl. 97.
(Newcastle and Dorsetshire).

# iii. Accentorinæ.

## 1. ACCENTOR.

Accentor, Bechst. Naturg. Deuts. iii. p. (1802). Prunella, Vieill. Analyse, p. 43 (1816). Tharrhaleus, Kaup, Naturl. Syst. der Eur. Thier. p. 137 (1829). Spermolegus, Kaup, Naturl. Syst. der Eur. Thier. p. 152 (1829).

#### a. ACCENTOR.

## 1. ACCENTOR ALPINUS. The Alpine Accentor.

Motacilla alpina, Gmel. S. N. i. p. 957. Sturnus moritanus, Gmel. S. N. i. p. 804. Sturnus collaris, Gmel. S. N. i. p. 805.

Accentor alpinus, Bechst. Naturg. Deuts. iii. p. 700; Temm. Man. d'Orn. 1815, p. 248; Naum. Vög. Deuts. (1823) iii. p. 940, t. 92, f. 1; Flem. Brit. An. p. 72; Brehm, Vög. Deuts. p. 456; Jenyns, Man. B. Vert. An. p. 102; Eyton, Cat. Brit. B. p. 13; Macgill. Hist. Brit. B. ii. p. 258; Pr. Bonap. Geogr. Comp. List of B. p. 15; Keys. & Bl. Wirbelth. Eur. p. 53; Schleg. Rev. Crit. des Ois. d'Eur. p. 43; G. R. Gray, Gen. of B. i. p. 187.

Alpine Accentor, Eyton, R. Brit. B. p. 11, fig.; Yarr. Brit. B. 2 edit. i. p. 239, fig.

Pl. enl. 668; Gould, B. of Eur. pl. 99. (Cambridgeshire, Essex, and Somersetshire).

## b. THARRHALEUS.

## 2. ACCENTOR MODULARIS. The Hedge Accentor.

Motacilla modularis, Linn. S. N. i. p. 329. Sylvia modularis, Lath. Ind. Orn. ii. p. 511; Temm. Man. d'Orn. 1815, p. 121. Accentor modularis, Bechst. Naturg. Deuts. iii. p. 617; Koch, Baier. Zool. i. p. 196; Temm. Man. d'Orn. 1820, p. 249; Naum. Vög. Deuts. (1823) iii. p. 951, t. 92, f. 3, 4; Flem. Brit. An. p. 71; Brehm, Vog. Deuts. p. 458; Jenyns, Man. B. Vert. An. p. 103; Eyton, Cat. Brit. B. p. 13; Macgill. Hist. Brit. B. ii. p. 251; Pr. Bonap. Geogr. Comp. List of B. p. 15; Keys. & Bl. Wirbelth, Eur. p. 53; Schleg. Rev. Crit. des ()is. d'Eur. p. 44; G. R. Gray, Gen. of B. p. 187. Accentor piretorum, Brehm, Vog. Deuts. i. p. 457, t. xxiv. f. 1. Tharrhaleus modularis, Kaup, Naturl. Syst. p. 137. Curruca Eliotæ, Leach, Syst. Cat. Mam. and B. B. M. p. 24.

The Winter Fauvette, Bew. Brit. B. (1797) i. p. 213.

Hedge Warbler, Mont. Orn. Dict.

Hedge Sparrow Warbler, Penn. Brit. Zool. (1812) i. p. 509. Hedge Accentur, Selby, Brit. Orn. i. p. 205; Yarr. Brit. B. 2 edit. i. p. 243, fig.

Pl. enl. 615, f. 1. Gould, B. of Eur. pl. 100.

a. Devonshire. Female. From Col. Montagu's collection. b, c. Cambridgeshire. Males. Presented by Mr. J. Baker. d-f. Cambridgeshire. Young. Presented by Mr. J. Baker. g. Sternum. England. Presented by T. Ingall, Esq.

## iv. PARINÆ.

#### 1. PARUS.

Parus, Linn. S. N. (1735). Lophophanes, Kaup, Naturl. Syst. der Eur. Thier. p. 92 (1829). Cyanistes, Raup, Naturl. Syst. der Eur. Thier. p. 99 (1829). Pœcilla, Kaup, Naturl. Syst. der Eur. Thier. p. 114 (1829). Melanochlora, Less. (1839). Crataionyx, Eyton, Proc. Z. S. 1839, p. 104 (1839). Psaltria, Temm. Pl. col. Orites, Mahring, Syst. Av. p. 45, (1752). Mecistura, Leach, Syst. Cat. Mam. & B. B. M. p. 17 (1816). Acredula, Koch, Baier. Zool. p. (1816).Paroides, Brehm, Isis, p. 1284 (1828). Megistina, Vieill: Analyse, &c. p. 31 (1816).

### a. PARUS.

## 1. PARUS MAJOR. The Great Titmouse.

Parus major, Linn. S. N. i. p. 341; Temm. Man. d'Orn. 1815, p. 165; Leach, Syst. Cat. Mam. & B. B. M. p. 16; Naum. Vöy. Deuts. (1824) iv. p. 9, t. 94, f. 1; Flem. Brit. An. p. 80; Brehm, Vog. Deuts. p. 461, t. xxiv. f. 2; Jenyns, Man. B. Vert. An. p. 121; Eyton, Cat. Brit. B. p. 17; Pr. Bonap. Geogr. Comp. List of B. p. 19; Keys. & Bl. Wirbelth. Eur. p. 43; Schleg. Rev. Crit. des Ojs. d'Eur. p. 45; G. R. Gray, Gen. of B. i. p. 192.

Parus robustus, Brehm, Vog. Deuts. p. 461.

Parus fringillago, Pall. Zoogr. i. p. 555; Maegill. Hist. Brit. B. ii. p. 425.

The Greater Titmouse, Bew. Brit. B. (1797) i. p. 237, fig.

Great Titmouse, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 532, pl. lxiv. f. 1; Selby, Brit. Orn. i. p. 226.

The Great Tit, Yarr. Brit. B. 2 edit. i. p. 358, fig.

Pl. enl. 3, f. 1; Gould, B. of Eur. pl. 150.

a. Devonshire. Male. From Col. Montagu's collection.

b, c. Saffron Walden. From Mr. J. Clark's collection.
d. Cambridgeshire. Very young. Presented by Mr. J. Baker.
e. Cambridgeshire. From Mr. J. Baker's collection.

f. ? Sternum. England. Presented by T. Ingall, Esq.

## 2. PARUS CERULEUS. The Blue Titmouse.

Parus cæruleus, Linn. S. N. i. p. 341; Temm. Man. d'Orn. 1815, p. 168; Leach, Syst Cat. Mam. & B. B. M. p. 16; Naum. Vog. Deuts. (1823) iv. p. 62, t. 95, f. 1; Flem. Brit. An. p. 80; Brehm. Vog. Deuts. p. 462; Jenyns, Man. B. Vert. An. p. 122; Eyton. Cat. Brit. B. p. 17; Macgill. Hist. Brit. B. ii. p. 431; Pr. Bonap. Geogr. Comp. List of B. p. 20; Keys. & Bl. Wirbelth. Eur. p. 43; Schleg. Rev. Crit. des Ois. d'Eur. p. 46; G. R. Gray, Gen. of B. i. p. 192.

Parus cærulescens, Brehm, Vog. Deuts. p. 463. Cyanistes caruleus, Kaup, Naturl. Syst. p. 99.

The Blue Titmouse, Bew. Brit. B. (1797) i. p. 239, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 534, pl. Ixiv. f. 2; Selby, Brit. Orn. i. p. 228.

The Blue Tit, Yarr. Brit. B. 2 edit. i. p. 362, fig. Pl. enl. 3, f. 2; Gould, B. of Eur. pl. 154.

a. Devonshire. Male. From Col. Montagu's collection. Female. From Col. Montagu's collection. b. Devonshire. c-e. Saffron Walden. From Mr. J. Clark's collection.

f, g. Cambridgeshire. Young. Presented by Mr. J. Baker. h. Skull. England. Presented by John Ray, Esq.

## b. PŒCILE.

### 3. PARUS ATER. The Cole Titmouse.

Parus ater, Linn. S. N. i. p. 341; Temm. Man. d'Orn. 1815, p. 167; Leach, Syst. Cat. Man. & B. B. M. p. 17; Naum. Vog. Deuts. (1823) iv. p. 34, t. 94, f. 2; Flem. Brit. An. p. 80; Brehm, Vog. Deuts. p. 466; Jenyns, Man. B. Vert. An. p. 123; Eyton, Cat. Brit. B. p. 17; Macgill. Hist. Brit. B. ii. p. 440; Pr. Bonap. Geogr. Comp. List of B. p. 20; Keys. & Bl. Wirbelth. Eur. p. 43; Schleg. Rev. Crit. des Ois. d'Eur. p. 46; G. R. Gray, Gen. of B. i. p. 192.

Parus abietum, Brehm, Vog. Deuts. p. 466. Parus carbonarius, Pall. Zoogr. i. p. 556. Poecile ater, Kaup, Naturl. Syst. p. 114.

The Cole Titmouse, Bew. Brit. B. (1797) i. p. 241, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 535, pl. lxiv. f. 3; Selby, Brit. Orn. i. p. 231.

The Cole Tit, Yarr. Brit. B. 2 edit. i. p. 369, fig.

Gould, B. of Eur. pl. 155, f. 1.

a. Devonshire. Male. From Col. Montagu's collection. b, c. Saffron Walden. From Mr. J. Clark's collection.

d. Cambridgeshire. Young. Presented by Mr. J. Baker. e, f. Cambridgeshire. Very young. Presented by Mr. J. Baker.

#### The Marsh Titmouse. 4. PARUS PALUSTRIS.

Parus palustris, Linn. S. N. i. p. 341; Temm. Man. d'Orn. 1815. p. 170; Leach, Syst. Cat. Mam. & B. B. M. p. 17; Naum. Vog. Deuts. (1824) iv. p. 50, t. 94, f. 2; Flem. Brit. An. p. 80; Brehm, Vög. Deuts. p. 465; Jenyns, Man. B. Vert. An. p. 123; Eyton, Cat. Brit. B. p. 17; Macgill. Hist. Brit. B. ii. p. 445; Pr. Bonap. Geogr. Comp. List of B. p. 20; Keys. & Bl. Wirbelth. Eur. p. 43; Schleg. Rev. Crit. des Ois. d'Eur. p. 45; G. R. Gray. Gen. of B. i. p. 192.

Parus atricapillus, Gmel. S. N. i. p. 1008. Parus salicarius, Brehm, Vög. Deuts. i. p. 465.

Poecile palustris, Kaup, Naturl. Syst. p. 114. The Marsh Titmouse, Bew. Brit. B. (1797) i. p. 242, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 536; Selby, Brit. Orn. i. p. 230.

The Marsh Tit, Yarr. Brit. B. 2 edit. i. p. 372, fig. Pl. enl, 3, f. 3; Gould, B. of Eur. pl. 155, f. 2.

a. Great Britain. b. Great Britain.

c. Devenshire. Male. From Col. Montagu's collection. d. Devonshire. Female. From Col. Montagu's collection.

e, f. Saffron Walden. From Mr. J. Clark's collection.

g. Cambridgeshire. h. Skull. England.

#### c. LOPHOPHANES.

## 5. PARUS CRISTATUS. The Crested Titmouse.

Parus cristatus, Linn. S. N. i. p. 340; Temm. Man. d'Orn, 1815, p. 169; Leach, Syst. Cat. Mam. & B. B. M. p. 17; Naum. Vog. Deuts. (1823) iv. p. 42, t. 94, f. 3; Flem. Brit. An. p. 81; Brehm, Vög. Deuts. p. 468; Jenyns, Man. B. Vert. An. p. 122; Eyton, Cat. Brit. B. p. 17; Macgill. Hist. Brit B. ii. p. 450; Pr. Bonap. Geogr. Comp. List of B. p. 20; Keys. & Bl. Wirbelth. Eur. p. 44; Schleg. Rev. Crit. des Ois. d'Eur. p. 45; G. R. Gray, Gen. of B. i. p. 192.

Parus mitratus, Brehm, Vög. Deuts. p. 467.

Lophophanes cristatus, Kaup, Naturl. Syst. p. 92.

Crested Titmouse, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 542; Selby, Brit. Orn. i. p. 235.

The Crested Tit, Yarr. Brit. B. 2 edit. i. p. 366, fig.

Pl. enl. 502, f. 2; Gould, B. of Eur. pl. 156. a. Great Britain? From Mr. Gould's collection.

b. Great Britain.

## d. ORITES.

## 6. PARUS CAUDATUS. The Long-tailed Titmouse.

Parus caudatus, Linn. S. N. i. p. 342; Temm. Man. d'Orn. 1815, p. 173; Naum. Vog. Deuts. (1823) iv. p. 82, t. 95, f. 4, 5, 6;

Flem. Brit. An. p. 81; Jenyns, Man. B. Vert. An. p. 124; Byton, Cat. Brit. B. p. 17; Schleg. Rev. Crit. des Ois. d'Eur. p. 46; G. R. Gray, Gen. of B. i. p. 192. Lanius caudatus, Linn. Faun. Suec. p. 28. Lanius biarmicus, Linn. Faun. Suec. p. 29.

Parus longicaudatus, Briss. Orn. iii. p. 570.

Orites caudata, Mahring, Syst. Av. p. 45.

Mecistura vagans, Leach, Syst. Cat. Mam. & B. B. M. p. 17. Acredula caudata, Koch, Baier, Zool. i. p. 200; Kaup, Naturl. Syst. p. 27.

Mecistura caudata, Pr. Bonap. Geogr. Comp. List of B. p. 20. Parus (Mecistura) caudata, Keys. & Bl. Wirbelth. Eur. p. 43.

Paroides caudatus, Brehm, Vog. Deuts. p. 471.

Paroides longicaudus, Brehm, Vog. Deuts. p. 470. Ægithalus caudatus, Boie, Isis (1825), p. 556.

Mecistura longicaudata, Macgill. Hist. Brit. B. ii. p. 454.

Mecistura rosea, Bl.? The Long-tailed Titmouse, Bew. Brit. B. (1797) i. p. 243, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. 537; Selby, Brit. *Orn.* i. p. 233.

The Long-tailed Tit, Yarr. Brit. B. 2 edit. ii. p. 376, fig. Pl. enl. 502, f. 3; Gould, B. of Eur. pl. 157.

- a. Devonshire. From Col. Montagu's collection.
- b. Saffron Walden. From Mr. J. Clark's collection.
- c. Sternum. England. Presented by T. Ingall, Esq.

#### 2. PAROIDES.

Paroides, Koch, Baier. Zool. i. p. (1816).Ægithalus, Boie, Isis (1822), p. 556. Pendulinus, Brehm, Isis (1828), p. 1284. Panurus, Koch, Baier. Zool. i. p. (1816). Calamophilus, Leach, Syst. Cat. Mam. & B. B. M. p. 17 (1816). Mystacinus, Boie, Isis (1822), p. 556.

#### a. PANURUS.

## 1. PAROIDES BIARMICUS. The Bearded Titmouse.

Parus biarmicus, Linn. S. N. i. p. 342; Temm. Man. d'Orn. 1815, p. 174; Naum. Vog. Deuts. (1823) iv. p. 98, t. 96; Flem. Brit. An. p. 81; Schleg. Rev. Crit. des Ois. d'Eur. p. 47.

Paroides biarmicus, G. R. Gray, Gen. of B. i. p. 193.

Lauius biarmicus, Brün. Orn. p. 8.

Parus barbatus, Briss. Orn. iii. p. 567.

Parus russicus, Gmel. S. N. ii. p. 164, t. 10.

Panurus biarmicus, Koch, Baier. Zool. i. p. 202; Kaup, Naturt. Syst. p. 32.

Mystacinus biarmicus, Boie, Isis (1822), p. 556; Brehm, Vög. Deuts, p. 473.

Ægythalus biarmicus, Boie, Isis (1826), p. 975.

Calamophilus biarmicus, Leach, Syst. Cat. Mam. & B. B. M. p. 17; Eyton, Cat. Brit. B. p. 18; Jenyns, Man. B. Vert. An. p. 125; Macgill. Hist. Brit. B. iii. p. 694; Pr. Bonap. Geogr. Comp. List of B. p. 20.

Calamophilus barbatus, Keys. & Bl. Wirbelth. Eur. p. 43.

Mystacinus russicus, Brehm, Vog. Deuts. p. 472.

Mystacinus arundinaceus, Brehm, Vog. Deuts. p. 474.

Mystacinus dentatus, Brehm, Viig. Deuts. p. 474.

The Bearded Titmouse, Bew. Brit. B. (1797) i. p. 246, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 540; Selby, Brit. Orn. i. p. 236.

The Bearded Tit, Yarr. Brit. B. 2 edit. ii. p. 381, fig.

Pl. enl. 618, f. 1, 2; Gould, B. of Eur. pl. 158.

a. Sussex. Male. From Col. Montagu's collection.
b. Sussex. Female. From Col. Montagu's collection.
c—e. Cambridgeshire. Presented by Mr. J. Baker.

f. Cambridgeshire. Young. Presented by Mr. J. Baker. g—i. Three Sterna. England. Presented by T. Ingall, Esq.

j. Sternum. England. Presented by John Ray, Esq. k. Skull. England. Presented by John Ray, Esq.

## V. MOTACILLINÆ.

## 1. MOTACILLA.

Motacilla, Linn. S. N. (1735). Budytes, Cuv. Règ. An. (1817) i. p. 371. Calobates, Kaup, Naturl. Syst. der Eur. Thier. p. 33 (1829).

## a. MOTACILLA.

## 1. MOTACILLA ALBA. The White Wagtail.

Motacilla alba, Linn. S. N. i. p. 331; Leach, Syst. Cat. Mam. & B. B. M. p. 22; Naum. Vög. Deuts. (1823) iii. p. 803, t. 86, f. 1, 2,

3; Brehm, Vog. Deuts. p. 347; Macgill. Hist. Brit. B. ii. p. 221; Temm. Man. d'Orn. (1820) i. p. 255, iii. p. 178; Pr. Bonap. Geogr. Comp. List of B. p. 19; Keys, & Bl. Wirlbeth, Eur. p. 49; Schleg. Rev. Crit. des Ois. d'Eur. p. 37; G. R. Gray, Gen. of B. i. p. 203.

Motacilla cinerea, Linn. S. N. i. p. 961.

Motacilla albevla, Pall. Zoogr. i. p. 506.

Motacilla septentrionalis, Brehm, Vog. Deuts. p. 347. Motacilla sylvestris, Brehm, Vog. Deuts. p. 348, t. xx. f. 5.

Motacilla brachyrhynchos, Brehm, Vög. Deuts, p. 348. Motacilla albida, Gmel. S. N. i. p. 77; Jacq. Beitr. t. 8. Motacilla Brissoni, Macgill. Man. N. H. Ornith. i. p. 160 The White Wagtail, Yarr. Brit. B. 2 edit. i. p. 403, fig.

Pl. enl. 652, f. 1, 2, 674, f. 1.; Gould, Br. Eur. pl. 143. (Kingsbridge, Carlisle, and Falmouth).

## 2. MOTACILLA YABRELLII. The Pied Wagtail.

Motacilla alba, Flem. Brit. An. p. 72; Jenyns, Man. B. Vert. An. p. 114.

Motacilla Yarrellii, Gould, Macgill, Hist, Brit, B. ii, p. 225; Pr. Bonap. Geogr. Comp. List of B. p. 19; Keys. & Bl. Wirbelth. Eur. p. 49; G. R. Gray, Gen. of B. i. p. 203.

Motacilla lugubris, Pall. F Temm. Man. d'Orn. (1820) i. p. 253, iii. p. 175; Pr. Bonap. Geogr. Comp. List of B. p. 19.

Motacilla alba lugubris, Schleg. Rev. Crit. des Ois. Eur. p. 37.

White Wagtail, Penn. Brit. Zool. (1812) i. p. 489; Mont. Orn. Dict.

The Pied Wagtail, Bew. Brit. B. (1797) i. p. 188, fig.; Selby, Brit. Orn. i. p. 208; Yarr. Brit. B. 2 edit. i. p. 395, fig. Gould, B. of Eur. pl. 142.

a, b, Great Britain. From Mr. Gould's collection.

c. Great Britain.

d. Wiltshire. From Col. Montagu's collection.

e. Devoushire. Variety. Presented by C. Prideaux, Esq.

f. Bristol? Variety. Presented by J. Raddon, Esq.
g, h. Cambridgeshire. Young. Presented by Mr. J. Baker,
i. Saffron Walden. Young. From Mr. J. Clark's collection.
j. Cambridgeshire. Male. From Mr. J. Baker's collection.
k. Cambridgeshire. Young. From Mr. J. Baker's collection.

1. Sternum. England. Presented by T. Ingall, Esq. m. Sternum. England. Presented by John Ray, Esq.

## b. CALOBATES.

## 3. MOTACILLA SULPHUREA. The Grey Wagtail.

Motacilla bearula, Penn. Brit. Zool. i. p. 492; Flem. Brit. An. p. 74; Jenyns, Man. B. Vert. Anim. p. 115; G. R. Gray, Gen. of B. i. p. 203; Pr. Bonap. Geogr. Comp. List of B, p. 19; Keys. & Bt. Wirbelth. Eur. p. 49; Schleg. Rev. Crit. des Ois. d'Eur.

Budytes boarula, Eyton, Cat. Brit. B. p. 15, Motacilla melanopa, Pall. Zongr. i. p. 500.

Motacilla cinerea, Leach, Syst. Cat. Mam. & B. B. M. p. 22.

Motacilla sulphurea, Bechst. Naturg. Deuts. iii. p. 459; Naum. Vog. Deuts. iii. p. 824, t. 87, f. 1, 2,3; Brehm, Vog. Deuts. p. 346.

Motacilla montium, Brehm, Vög. Deuts. p. 345. Calobates sulphurea, Kaup, Naturl. Syst. p. 33.

The Grey Wagtail, Bew. Brit. B. (1797) i. p. 190, fig.; Mont. Orn. Diet.; Penn. Brit. Zool. (1812) i. p. 492; Selby, Brit. Orn. i. p. 209; Yarr. Brit. B. 2 edit. ii. p. 407, fig.

Pl. enl. 28, f. 1; Gould, B. of Eur. pl. 147.

a. Wiltshire. Summer, female. From Col. Montagu's collection.
b. Wiltshire. Snmmer, male, From Col. Montagu's collection.
c. Wiltshire. Winter, male. From Col. Montagu's collection.

d. Wiltshire. Winter, female. From Col. Montagu's collection.
 e. Saffron Walden. From Mr. J. Clark's collection.
 f. Cambridgeshire. Female. From Mr. J. Baker's collection.

g. Sternum. England. Presented by John Ray, Esq.

## c. BUDYTES,

## 4. MOTACILLA FLAVA. The Grey-headed Wagtail.

Motacilla flava, Linn. S. N. i. p. 331; Temm. Man. d'Orn. 1815, p. 146 (1820) i. p. 260, iii. p. 181; Naum. Vog. Deuts. (1823) iii. p. 839, t. 88; Schleg. Rev. Crit. des Ois. d'Eur. p. 38; G. R. Gray, Gen. of B. i. p 203.

Motacilla flaveola, Pall. Zoogr. i. p. 501.

Motacilla neglecta, Gould, Proc. Z. S. (1832) p. 129; Jenyns, Man. B. Vert. An. p. 116.

Motacilla boarula, Linn. Mant. p. 527. Budytes boarula, Brehm, Vog. Deuts. p. 343.

Motacilla Feldseggi, Michael.

Motaeilla chrysogaster, Bechst. Naturg. Deuts. iii. p. 446.

Motacilla cinereo-capilla, Savi, Ornith. Tosc. iii. p. 216; Pr. Bonap.

Fauna Italica, t. 31, f. 2.

Motacilla melano-cephala, Licht. Verz. der Doubl. des Zool. 1823, p. 36; Savi, Ornit. Tosc. iii. p. 219; Pr. Bonap. Fauna Ital. t. 31, f. 1.

Budytes Beema, Sykes, Proc. Z. S. (1832), p. 90.

Budytes flava, Cuv., Pr. Bonap. Geogr. Comp. List of B. p. 18. Motacilla (Budytes) flava, Keys. & Bl. Wirbelth, Eur. p. 49. Budytes Gouldii, Macgill. Man. N. H. Ornith. i. p. 163.

Budytes flavus, Cuv. Reg. An. (1817) i. p. 371; Brehm, Vog. Deuts.

p. 344, t. xx. f. 4; Macgill. Hist. Brit. B. ii. p. 208. The Grey-headed Wagtail, Yarr. Brit. B. 2 edit. i. p. 412, fig. Gould, B. of Eur. pl. 146.

a, b. Wiltshire. From Col. Montagu's collection. c, d. Great Britain. From Mr. Gould's collection.

## 5. MOTACILLA CAMPESTRIS. Ray's Wagtail.

Motacilla flava (Ray), Flem. Brit. An. p. 74; Jenyns, Man. B. Vert. An. p. 116.

Motacilla flaveola, Temm. Man. d'Orn. iii. p. 183.

Motacilia campestris, Pall. It. iii. p. 696; Keys. & Bl. Wirbelth. Eur. p. 49; G. R. Gray, Gen. of B. i. p. 203.

Budytes Rayli, Pr. Bonap. Geogr. Comp. List of B. p. 18; Macgill. Hist. Brit. B. ii. p. 212.

Budytes flava, Eyton, Cat. Brit. B. p. 15.

Motacilla flava Rayi, Schleg. Rev. Crit. des Ois. d'Eur. p. 38.

The Yellow Wagtail, Bew. Brit. B. (1797) i. p. 191, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 491; Selby, Brit. Orn. i. p. 211.

Ray's Wagtail, Yarr. Brit. B. 2 edit. i. p. 418, fig.

Gould, B. of Eur. pl. 145.

a. Great Britain. From Mr. Gould's collection.

b. Wiltshire. Male. From Col. Montagu's collection.

c. Great Britain.

d. Great Britain. From Mr. Gould's collection.

e. Wiltshire. From Col. Montagu's collection. f. Cambridgeshire. Male. From Mr. J. Baker's collection. g. Cambridgeshire. Female. From Mr. J. Baker's collection.

h. Sternum. England. Presented by T. Ingall, Esq. i. Sternum. England. Presented by John Ray, Esq.

#### 2. ANTHUS.

Anthus, Bechst. Naturg. Deuts. iii. p. (1802).
Spipola, Leach, Syst. Cat. Mam. & B. B. M. p. 21 (1816).
Corydalla, Vigors, Zool. Journ. ii. p. 397 (1825).
Pipastes, Kaup, Naturl. Syst. der Eur. Thier. p. 33 (1829).
Leiomoniptera, Kaup, Naturl. Syst. der Eur. Thier. p. 39 (1829).
Agrodroma, Swains. Classif. of B. ii. p. 241 (1837).
Macronyx, Swains. Classif. of B. ii. p. 293 (1837).

#### a. CORYDALLA.

## 1. ANTHUS RICHARDII. Richard's Pipit.

Anthus Richardii, Vieill. N. Dict. d'Hist. Nat. xxvi. p. 491; Vigors, Zool. Journ. i. p. 411, pl. 14; Temm. Man. d'Orn. (1820) i. p. 263; Flem. Brit. An. p. 75; Jenyns, Man. B. Vert. An. p. 117; Eyton, Cat. Brit. B. p. 16; Pr. Bonap. Geogr. Comp. List of B. p. 18; Keys. & Bl. Wirbelth. Eur. p. 48; Schleg. Rev. Crit. des Ois. d'Eur. p. 36; G. R. Gray, Gen. of B. i. p. 206.

Anthus rupestris, Menetr. Catal. p. 37.

Corydalla Richardii, Vigors, Zool. Journ. (1825) p. 397; Brehm, Voq. Deuts. p. 323.

Richard's Pipit, Yarr. Brit. B. 2 edit. i. p. 436, fig.

Pl. col. 101.

a. Bermondsey.

## b. ANTHUS.

## 2. Anthus Pratensis. The Meadow Pipit.

Alauda pratensis, Linn. Faun. Suec. p. 76.
Alauda trivialis (Linn.) Mont. Orn. Dict.
Spinile pratensis Leach Suct. Cat. Man.

Alatta thirdais (Link.) Mont. Orh. Dect.

Spipila pratensis, Leach, Syst. Cat. Mam. & B. B. M. p. 21.

Anthus pratensis, Bechst. Naturg. Deuts. iii. p. 732; Temm. Man.

d'Orn. 1815, p. 151; Naum. Vög. Deuts. (1823) iii. p. 774, t. 84,
f. 3, t. 94, f. 1; Flem. Brit. An. p. 75; Jenyns, Man. B. Vert.

An. p. 117; Eyton, Cat. Brit. B. p. 15; Macgill. Hist. Brit. B.

ii. p. 181; Pr. Bonap. Geogr. Comp. List of B. p. 18; Keys. & Bl.

Wirbelth. Eur. p. 48; Schleg. Rev. Crit. des Ois. d'Eur. p. 35;
G. R. Gray, Gen. of B. i. p. 206.

Anthus sepiarius, Vieill. Faun. Franc. p. 177, t. 77, f. 2, 3.

Alauda mosellana, Gmel. S. N. i. p. 794. Leimoniptera pratensis, Kaup, Naturl. Syst. p. 39. Anthus stagnatilis, Brehm, Vog. Deuts. p. 332. Anthus danicus, Brehm, Vog. Deuts. p. 333. Anthus pratorum, Brehm, Vog. Deuts. p. 333. Anthus palustris, Brehm, Vög. Deuts. p. 334. Anthus alticeps, Brehm, Vög. Deuts. p. 335. Anthus tenuirostris, Brehm, Vog. Deuts. p. 335. Anthus musicus, Brehm, Vog. Deuts. p. 336. Anthus virescens, Brehm, Vog. Deuts. p. 337. Anthus Lichtensteini, Brehm, Vög. Deuts. p. 338. Anthus desertorum, Brehm, Vog. Deuts. p. 338. Anthus montanellus, Brehm, Vog. Deuts. p. 339.

The Tit Lark, Bew. Brit. B. (1797) i. p. 185, fig.; Penn. Brit.

Zool. (1812) i. p. 481.

Pipit Lark, Mont. Orn. Dict. The Meadow Pipit or Tit, Selby, Brit. Orn. i. p. 216. The Meadow Pipit, Yarr. Brit. B. 2 edit. i. p. 427, fig.

Pl. enl. 660, f. 2; Gould, B. of Eur. pl. 136.

a. Wiltshire. Male. From Col. Montagu's collection. b. Wiltshire. Female. From Col. Montagu's collection.

c. Surrey. Variety. d. London. Variety.

f. Cambridgeshire. Presented by Mr. J. Baker.

g. Cambridgeshire. Male. From Mr. J. Baker's collection. Female. From Mr. J. Baker's collection. h. Cambridgeshire.

## 3. ANTHUS ARBOREUS. The Tree Pipit.

Alauda trivialis, Linn. S. N. i. p. 288.

Alauda minor, Mont. Orn. Diet.

Anthus arboreus, Bechst. Naturg. Deuts. iii. p. 706; Temm. Man. d'Orn. 1815, p. 153; Naum. Vog. Deuts. (1823) iii. p. 758, t. 84, f. 2; Jenyns, Man. B. Vert. An. p. 118; Macgill. Hist. Brit. B. ii. p. 174; Pr. Bonap. Geogr. Comp. List of B. p. 18; Keys. & Bl. Wirbelth. Eur. p. 48; Schleg, Rev. Crit. des Ois. d'Eur. p. 36; G. R. Gray, Gen. of B. i. p. 206.

Motacilla spipola, Pall. Zoogr. i. p. 512.

Alauda turdinæ, Scop.

Anthus trivialis, Flem. Brit. An. p. 75; Eyton, Cat. Brit. B. p. 15. Pipastes arboreus, Kaup, Naturl. Syst. p. 33.

Anthus foliorum, Brehm, Vog. Deuts. p. 326.

Anthus juncorum, Brehm, Vog. Deuts. p. 326.

Anthus herbarum, Brehm, Vog. Deuts. p. 327.

The Field Lark, Bew. Brit. B. (1797) i. p. 180? Penn. Brit. Zool. (1812) i. p. 484?

The Grasshopper Lark, Bew. Brit. B. (1797) i. p. 181.

Tree Pipit, Selby, Brit. Orn. i. p. 218; Yarr. Brit. B. 2 edit. i. p. 422, fig.

Pl. enl. 660, f. 1; Gould, B. of Eur. pl. 139.

a. Devonshire. From Col. Montagu's collection.

## 4. Anthus obscurus. The Rock Pipit.

Alauda obscura, Lath. Ind. Orn. ii. p. 494.

Spipila obscura, Leach, Syst. Cat. Mam. & B. B. M. p. 22.

Alauda petrosa, Mont. Linn. Trans. iv. p. 41.

Anthus obscurus, Keys. & Bl. Wirbelth. Eur. p. 48; Macgill. Man. N. H. Ornith. i. p. 168; G. R. Gray, Gen. of B. i. p. 206.

Anthus aquaticus, Temm. Man. d'Orn. 1815, p. 149 (part); Macgill, Hist. Brit. B. ii. p. 194; Schleg. Rev. Crit. des Ois. d'Eur. p. 36. Anthus rupestris, Wils. Orn. Suec. i. p. 245, t. 9; Brehm, Vög.

Deuts. p. 330; Schleg. Rev. Crit. des Ois. d'Eur. p. 35.

Anthus montanus, Koch, Baier. Zool. i. p. 172.

Anthus petrosus, Flem. Brit. An. p. 74; Jenyns, Man. B. Vert. An. p. 118.

Anthus littoralis, Brehm, Vog. Deuts. p. 331.

Anthus spinoletta, Pr. Bonap. Geogr. Comp. List of B. p. 18; Keys. & Bl. Wirbelth. Eur. p. 48.

Dusky Lark, Lew. Brit. B. pl. 94; Penn. Brit. Zool. (1812) i. p.

Rock Lark, Mont. Orn. Dict.

Rock or Shore Pipit, Selby, Brit. Orn. i. p. 214. Rock Pipit, Yarr, Brit. B. 2 edit. i. p. 432, fig.

Penn. Brit. Zool. (folio) pl. 1, f. 2; Gould, B. of Eur. pl. 138.

(On the coast from Kent to Land's End, Wales and Ireland).

## 5. Anthus Ludovicianus. The Red Lark.

Alauda spinoletta, Linn. S. N. i. p. 288?

Alauda rubra, Gmel. S. N. i. p. 794; Flem. Brit. An. p. 79; Jenyns, Man. B. Vert. An. p. 126.

Alauda ludoviciana, Gmel. S. N. i. p. 793. Alauda rufa, Wils. Amer. Orn. pl. 42, f. 2.

Anthus spinoletta, Pr. Bonap. Synop. of B. of Am. p. 90; Macgill. Man. N. H. Ornith. i. p. 169. Anthus aquaticus, Rich. & Sw. Faun. Bor. Amer. p. 231; Temm. Man. d'Orn. iii. p. 623.

Anthus ludovicianus, Licht., Pr. Bonap. Geogr. Comp. List of B. p. 18; G. R. Gray, Gen. of B. i. p. 206.

Red Lark, Mont. Orn. Dict. App.; Penn. Brit. Zool. (1812) i. p. 486.

Edwards' Birds, pl. 297; Lewin, Brit. B. pl. 93. (Near Edinburgh).

## FAM. II. TURDIDÆ.

#### i. FORMICARINZE.

#### 1. HYDROBATA.

Hydrobata, Vieill. Analyse, p. 42 (1816). Cinclus, Bechst. Ornith. Taschenb. i. p. 206 (1802). Aquatilis, Mont. Orn. Dict. Append. (1813).

## 1. HYDROBATA CINCLUS. The Common Dipper.

Sturnus cinclus, Linn. Fauna Suec. p. 78. Hydrobata cinclus, G. R. Gray, Gen. of B. i. p. 215.

Turdus cinclus, Lath. Ind. Orn. i. p. 343.

Cinclus aquaticus, Bechst. Ornith. Taschenb. i. p. 206; Temm. Man. d'Orn. 1815, p. 97; Naum. Vog. Deuts. (1823) iii. p. 925. t. 91, f. 1-3; Flem. Brit. An. p. 67; Jenyns, Man. B. Vert. An. p. 98; Brehm, Vog. Deuts. p. 395; Eyton, Cat. Brit. B. p. 9; Pr. Bonap. Geogr. Comp. List of B. p. 19; Keys. & Bl. Wirbelth. Eur. p. 47; Schleg. Rev. Crit. des Ois. d'Eur. p. 43.

Aquatilis cinclus, Mont. Orn. Dict. Suppl.

Cinclus europæus, Leach, Syst. Cat. Mam. & B. B. M. p. 21; Macgill. Hist. Brit. B. ii. p. 50.

Hydrobata albicollis, Vieill. Encyc. Meth. p. 77.

Cinclus medius, Brehm, Vög. Deuts. p. 395, t. xxii. f. 2.

Cinclus septentrionalis, Brehm, Vög. Deuts. p. 396. Cinclus melanogaster, Brehm, Vög. Deuts. p. 396.

Water Ouzel, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 398.

European Dipper, Selby, Brit. Orn. i. p. 162.

The Common Dipper, Yarr. Brit. B. 2 edit. i. p. 181, fig. Penrith Ouzel, Penn. Brit. Zool. i. p. 399, pl. 41.

Pl. enl. 940; Gould, B. of Eur. pl. 83, 84.

Turdus philomelos, Brehm, Vög. Deuts. p. 382.

Turdus pilaris, Pall. Zoogr. i. p. 455.

Sylvia musica, Savi, Ornit. Tosc. i. p. 211.

The Throstle, Bew. Brit. B. (1797) i. p. 100, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812), i. p. 407.

Song Thrush, Selby, Brit. Orn. i. p. 154; Yarr. Brit. B. 2 edit. i. p. 202, fig.

Gould, B. of Eur. pl. 78, f. 1.

a. Devonshire. Male. From Col. Montagu's collection.

b. Surrey. Very young.

c. England. From Mr. Gould's collection.

d, e. Epping. Presented by Henry Doubleday, Esq. f. Saffron Walden. From Mr. J. Clark's collection.

g. Cambridgeshire. Variety. Presented by J. Clark, Esq.

h, i. Cambridgeshire. Presented by Mr. J. Baker.

j. Sternum. England. Presented by T. Ingall, Esq.

## 4. Turdus Illacus. The Redwing.

Turdus iliacus, Linn, S. N. i. p. 292; Temm. Man. d'Orn. 1815, p. 89; Leach, Syst. Cat. Mam. & B. B. M. p. 20; Naum. Vög. Deuts. (1822) ii. p. 276, t. 67; Flem. Brit. An. p. 65; Brehm, Vög. Deuts. p. 385; Eyton, Cat. Brit. B. p. 9; Macgill. Hist. Brit. B. ii. p. 141; Pr. Bonap. Geogr. Comp. List of B. p. 17; Keys. & Bl. Wirbelth. Eur. p. 50; Schleg. Rev. Crit. des Ois.

d Eur. p. 40; G. R. Gray, Gen. of B. i. p. 218. Turdus betularum, Brehm, Vög. Deuts. p. 386. Turdus vinetorum, Brehm, Vög. Deuts. p. 386. Sylvia iliaca, Savi, Ornit. Tosc. i. p. 215.

Syria maca, Suca, Orbit. Posc. 1, p. 215.
 The Redwing, Bew. Brit. B. (1797) i. p. 102, fig.; Mont. Orn. Diet.; Penn. Brit. Zool. (1812) i. p. 409; Selby, Brit. Orn. i. p. 156; Yarr. Brit. B. 2 edit. i. p. 207, fig.

Gould, B. of Eur. pl. 78, f. 2.

a. Devonshire. Male. From Col. Montagu's collection.

b. Devonshire. Variety. From Col. Montagu's collection.
c. Cambridgeshire. Male. From Mr. J. Baker's collection.

d. Cambridgeshire. Female. From Mr. J. Baker's collection.

e. Surrey. Female.

f. Saffron Walden. From Mr. J. Clark's collection. g. Sternum. England. Presented by T. Ingall, Esq.

## b. OREOCINCLA.

#### 5. TURDUS WHITEI. White's Thrush.

Turdus Dauma, Lath. Ind. Orn. i. p. 362?

Turdus varius, Horsf. Linn. Trans. xiii. p. 149? Jenyns, Man. B. Vert. An. p. 101; Macgill, Hist. Brit. B. ii. p. 146; Keys. & Bl. Wirbelth. Eur. p. 52; Schleg. Rev. Crit. des Ois. d'Eur. p. 42.

Turdus Whitei, Eyton, Hist. R. Brit. B. p. 92, fig.; Keys. & Bl. Wirbelth. Eur. p. 52; Schleg. Rev. Crit. des Ois. d'Eur. p. 41, 1; Harvey, Fauna of Cork, p. 6; Allm. Ann. Nat. Hist. xii. p. 78: G. R. Gray, Gen. of B. i. p. 218.

Turdus varius seu Whitei, Temm. Man. d'Orn. iv. p. 602.

Turdus aureus, Holandre, Fauna de la Moselle, p. 60.

Oreocincla Whitei, Gould, Proc. Z. S. 1837, p. 45; Pr. Bonap. Geogr. Comp. List of B. p. 17.

White's Thrush, Yarr. Brit. B. 2 edit. i. p. 192, fig.

Gould, B. of Eur. pl. 81.

(Near Christchurch, and New Forest).

## c. MONTICOLA.

## 6. TURDUS SAXATILIS. The Rock Thrush.

Turdus saxatilis, Gmel. S. N. i. p. 833; Temm. Man. d'Orn. 1815, p. 92; Naum. Vöy. Deuts. (1822), ii. p. 348, t. 73: Schleg. Rev. Crit. des Ois. d'Eur. p. 42; G. R. Gray, Gen. of B. i. p. 220.

Lanius infaustus, Gmel. S. N. i. p. 310.

Saxicola montana, Koch, Baier. Zool. i. p. 185.

Petrocincla saxatilis, Vigors, Zool. Journ. (1825) p. 396; Pr. Bonap. Geogr. Comp. List of B. p. 16.

Sylvia saxatilis, Savi. Ornit. Tosc. i. p. 219. Monticola saxatilis, Boie, Isis (1822), p. 552.

Petrocossyphus saxatilis, Boie, Isis (1826), p. 972; Brehm, Vög.

Deuts. p. 369, t. xxi. f. 5.

Petrocossyphus Goureyi, Brehm, Vög. Deuts. p. 370. Petrocossyphus polyglottus, Brehm, Vög. Deuts. p. 370. Petrocichla saxatilis, Keys. § Bl. Wirbelth. Eur. p. 50. The Rock Thrush, Yarr. Brit. B. 2 edit. i. p. 235, fig.

Pl. enl. 562; Gould, B. of Eur. pl. 86.

(Therfield, Herts).

#### d. MERULA.

## 7. TURDUS TORQUATUS. The Ring Ouzel.

Turdus torquatus, Linn. S. N. i. p. 296; Temm. Man. d'Orn. 1815, p. 90; Leach, Syst. Cat. Mam. and B. B. M. p. 20; Naum. Vog. Deuts. (1822), ii. p. 318, t. 70; Flem. Brit. An. p. 65; Margill. Hist. Brit. B. ii. p. 100; Keys. & Bl. Wirlbeth. Eur. p. 51; Schleg. Rev. Crit. des Ois, d'Eur. p. 41; G. R. Gray, Gen. of B. i. p. 219.

Copsichus torquatus, Kaup, Naturl. Syst. 157.

Merula torquata, Boie, Isis (1822), p. 552; Brehm, Vog. Deuts. p. 374; Pr. Bonap. Geogr. Comp. List of B. p. 17.

Merula montana, Brehm, Vög. Deuts. p. 375. Merula collaris, Brehm, Vog. Deuts. p. 376.

Merula alpestris, Brehm, Vog. Deuts. p. 377, t. xxi. f. 6. Sylvia torquata, Savi, Ornit. Tosc. i. p. 206.

The Ring Ouzel, Bew. Brit. B. (1797), i. p. 92, fig.; Penn. Brit. Zool. (1812) i. p. 415, pl. 4, f. 1; Selby, Brit. Orn. i. p. 160; Yarr. Brit. B. 2 edit. i. p. 218, fig.

a. Cornwall. Female. From Col. Montagu's collection. b, c. Turnham Green. From Mr. J. Baker's collection.

#### 8. TURDUS MERULA. The Blackbird.

Turdus merula, Linn. S. N. i. p. 295; Temm. Man. d'Orn. 1815, p. 91; Naum. Vög. Deuts. (1822) ii. p. 326, t. 71; Flem. Brit. An. p. 65; Eyton, Cat. Brit. B. p. 8; Macgill. Hist. Brit. B. ii. p. 81; Keys, & Bl. Wirbelth. Eur. p. 51; Schleg. Rev. Crit. des Ois. d' Eur. p. 41; G. R. Gray, Gen. of B. i. p. 218.

Merula vulgaris, Pr. Bonap. Geogr. Comp. List of B. p. 17.

Merula merula, Boie, Isis (1822), p. 552.

Merula nigra, Leach, Syst. Cat. Mam. & B. B. M. p. 20.

Merula pinetorum, Brehm, Vog. Deuts. p. 372. Merula truncorum, Brehm, Vög. Deuts. p. 373. Merula alticeps, Brehm, Vög, Deuts, p. 373.

Merula carinolica, Brehm, Vög. Deuts. p. 374. Sylvia merula, Savi. Orn. Tosc. i. p. 205.

Merula vulgaris, Selby.

The Black Ouzel, Bew. Brit. B. (1797) i. p. 94, fig.

Blackbird, Mont. Orn. Dict.; Penn. Brit. Zool. (1812), i. p. 411; pl. 41; Selby, Brit. Orn. i. p. 158; Yarr. Brit. B. 2 edit. i. p. 211, fig.

Gould, B. of Eur. pl. 72.

a. England. Male.

b. Devonshire. Male. From Col. Montagu's collection.

- c. Yorkshire. Female, variety. Presented by Mr. R. Leadbeater. d. Devonshire. Female, variety. From Col. Montagu's collection.
   e. Devonshire. Male, variety. Presented by W. Comyns, Esq.
- f. Great Britain. Variety.

g. Great Britain. Variety.

h. Surrey. Very young.i. Epping. Male. Presented by Henry Doubleday, Esq. i. Cambridgeshire. Young. Presented by Mr. J. Baker.

## ii. Oriolinæ.

## 1. ORIOLUS.

Oriolus, Linn, S. N. (1766). Turdus, Mahring, Syst. Av. p. 33 (1752). Galbula, Scop. (1777). Mimetes, King, Narr. Coasts of Austr. ii. p. 418 (1827). Mimeta, Vig. & Horsf. Linn. Trans. xv. p. 326 (1826). Analcipus, Swains, Fauna Bor, Amer. ii. p. 482 (1831). Artamia, I. Geoff. (1832). Philocarpus, Mull. (1835). Erythrolanius, Less. (1840). Psaropholus, Jard. & Selby, Ill. of Orn. (1839).

## a. ORIOLUS.

## I. ORIOLUS GALBULA. The Golden Oriole.

Oriolus galbula, Linn. S. N. i. p. 160; Temm. Man. d'Orn. 1815, p. 79; Naum. Vög. Deuts. (1822) ii. p. 171, t. 61; Flem. Brit. An. p. 66; Brehm, Vog. Deuts. p. 155; Jenyns, Man. B. Vert. An. p. 102; Eyton, Cat. Brit. B. p. 23; Macgill. Hist. Brit. B. ii, p. 71; Pr. Bonap, Geogr. Comp. List of B. p. 16; Keys. & Bl. Wirlbeth. Eur. p. 50; Schleg. Rev. Crit. des. Ois. d Eur. p. 43; G. R. Gray, Gen. of B. i. p. 232. Coracias oriolus, Linn. Faun. Suec. p. 33.

Coracias galbula, Bechst. Naturg. Deuts. ii. p. 1292. Oriolus aureus, Brehm, Vog. Deuts. p. 156, t. xi. f. 4.

Oriolus garrulus, Brehm, Vog. Deuts. p. 157.

Golden Oriole, Mont. Orn. Diet.; Penn. Brit. Zool. (1812) i. p. 303, pl. xxxix.; Selby, Brit. Orn. i. p. 90; Yarr. Brit. B. 2 edit. i. p. 227, fig.

Pt. ent. 26, f. 1; Gould, B. Eur. pl. 71. (Summer visitor).

## i. Pycnonotinæ.

#### 1. PYCNONOTUS.

Pycnonotus, Kuhl. Isis (1826), p. 975.
Turdoïdes, Temm. Pl. col. (182?).
Brachypus, Swains. Zool. Journ. iii. p. 163 (1827).
Ixos, Temm. Pl. col. (182?).
Hæmatornis, Swains. Fauna Bor. Amer. ii. p. 485 (1831).
Aleurus, Hodgs. Gray's Zool. Miscell. p. 83 (1844).
Hemipus, Hodgs. Gray's Zool. Miscell. p. 83 (1844).
Ixidia, Blyth,

#### a. HÆMATORNIS.

## 1. PYCNONOTUS AURIGASTER. The Gold-vented Thrush.

Turdus aurigaster, Vieill. N. Dict. d'Hist. Nat. xx. p. 258; Encyc. Meth. p. 657.

Turdus chrysorrhæus, Temm. Pl. col.

Hæmatornis chrysorrhæus, Svains. Fauna Bor. Amer. p. 485.

Pycnonotus chrysorrhæus, Thomp. Ann. Nat. Hist. 1845, p. 308.

Pycnonotus aurigaster, G. R. Gray, Gen. of B. i. p. 237.

The Gold-vented Thrush, Lath. Hist. of B. v. p. 82; Levaill. Oil. d'Afr. t. 107, f. 2; Yarr. Brit. Birds, 2 edit. i. p. 224, fig.

(Mount Beresford, near Waterford).

## FAM. III. MUSCICAPIDÆ.

i. Muscicapinæ.

1. MUSCICAPA.

Muscicapa, Linn. S. N. (1766). Ficedula, Briss. Orn. (1760). Butalis, Boie, Isis (1826), p. 973 (1826).

#### a. MUSCICAPA.

# 1. MUSCICAPA ATRICAPILLA. The Pied Flycatcher.

Inscicapa atricapilla, Linn. S. N. i. p. 326; Leach, Syst. Cat. Mam. & B. B. M. p. 19; Flem. Brit. An. p. 63; Brehm, Vög. Deuts. p. 224; Eyton, Cat. Brit. B. p. 8; Macgill, Hist. Brit. B. iii. p. 524; Pr. Bonap. Geogr. Comp. List of B. 25; Keys. & Bl. Wirbelth. Eur. p. 61; Schleg. Rev. Crit. des Ois. d'Eur. p. 22; G. R. Gray, Gen. of B. i. p. 262.

Iuscicapa luctuosa, Temm. Man. d'Orn. (1815) i. p. 101; Naum. Vög. Deuts. (1822) ii. p. 231, t. 64, f. 2, 3, 4; Brehm, Vög. Deuts.

p. 225; Jenyns, Man. B. Vert. An. p. 97. mberiza luctuosa, Scop. Ann. i. No. 215.

Iotacilla ficedula, Linn. S. N. i. p. 330.
Iuscicapa streptophora, Vieill. Faun. Franc. p. 145, t. 63, f. 2, 3.

plvia ficedula, Lath. Ind. Orn. ii. p. 517.

Inscicapa muscipeta, Bechst. Naturl. Deuts. iii. p. 435; Brehm, Vög. Deuts. p. 226.

Inscicapa alticeps, Brehm, Vög. Deuts. p. 225. Inscicapa fuscicapilla, Brehm, Vög. Deuts. p. 226. Inscicapa atrogrisea, Brehm, Vög. Deuts. p. 227.

he Pied Flycatcher, Bew. Brit. B. (1797) i. p. 195, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 473; Selby, Brit. Orn. i. p. 148; Yarr. Brit. B. 2 edit. i. p. 177, fig.

Pl. enl. 668, f. 1; Gould, B. of Eur. pl. 63, f. 1.

Yorkshire. Male. From Col. Montagu's collection.

## b. BUTALIS.

## 2. Muscicapa Grisola. The Spotted Flycatcher.

Muscicapa grisola, Linn. S. N. i. p. 328; Temm. Man. d'Orn. 1815, p. 99; Leach, Syst. Cat. Mam. & B. B. M. p. 19; Naum. Vög. Deuts. (1822) ii. p. 216, t. 64, f. 1; Flem. Brit. An. p. 63; Jenyns, Man. B. Vert. An. p. 97; Eyton, Cat. Brit. B. p. 8; Macgill. Hist. Brit. B. iii. p. 518; Keys. & Bl. Wirbelth. Eur. p. 60; Schleg. Rev. Crit. des Ois. d'Eur. p. 22; G. R. Gray, Gen. of B. i. p. 262.

Intacilla ficedula, Linn. Faun. Suec. p. 90.

utalis grisola, Boie, Isis (1826), p. 973; Brehm, Vög. Deuts. p.

222; Pr. Bonap. Geogr. Comp. List of B. p. 25.

ntalis montana, Brehm, Vog. Deuts. p. 220, t. xv. f. 4.

Butalis pinetorum, Brehm, Vog. Deuts. p. 221. Spotted Flycatcher, Bew. Brit. B. (1797), i. p. 196; Mont. Orn. Dict.; Penn. Brit. Zool. (1812), i. p. 471; Selby, Brit. Orn. i. p. 146; Yarr. Brit. B. 2 edit. i. p. 172, fig.

Pl. enl. 565, f. 1; Gould, B. of Eur. pl. 65.

4. Wiltshire. Male. From Col. Montagu's collection.

b, c. Cambridgeshire. Very young. Presented by Mr. J. Baker.

d. Cambridgeshire. Male. From Mr. J. Baker's collection. c. Cambridgeshire. Female. From Mr. J. Baker's collection. f. Cambridgeshire. Young. From Mr. J. Baker's collection.

Sternum. England. Presented by John Ray, Esq.
 Skull. England. Presented by John Ray, Esq.

# FAM. IV. AMPELIDÆ.

## i. AMPELINÆ.

# 1. AMPELIS.

Ampelis, Linn. S. N. (1735). Bombycilla, Vieill. Ois. le d'Amér. Sept. (1807). Bombycivora, Temm, Man. d'Orn. (1815) p. 76. Bombyciphora, Meyer, Vog. Liv. u. Esthl. p. (1815). Corvus (pars), Ill. Prod. (1811).

## 1. AMPELIS GARRULUS. The Bohemian Waxwing.

Lauius garrulus, Linn. Faun. Suec. No. 82. Ampelis garrulus, Linn. S. N. i. p. 297; G. R. Gray, Gen. of B. i. p. 278.

Bombycilla bohemica (Briss.), Leach, Syst. Cat. Mam. & B. B. M. p. 18; Brehm, Vög. Deuts. p. 219; Eyton, Cat. Brit. B. p. 8. Bombyciphora poliocælia, Meyer, Vög. Liv. u. Esthl. p. 104.

Bombyeivora garrula, Temm. Man. d'Orn. (1815) p. 77; Naum. Vog. Deuts. (1822) ii. p. 143, t. 59.

Parus bombycilla, Pall. Zoogr. i. p. 548.

Bombycilla garrula, Flem. Brit. An. p. 64; Brehm, Vog. Deuts. p. 218, t. xv. f. 3; Jenyns, Man. B. Vert. An. p. 125; Macgill, Hist. Brit. B. iii. p. 531; Pr. Bonap, Geogr. Comp. List of B. p. 8; Keys. & Bl. Wirbelth. Eur. p. 44; Schleg. Rev. Crit. des Ois. d'Eur. p. 57.

The Chatterer, Bew. Brit. B. (1797) i. p. 83, fig. Bohemian Chatterer, Mont. Orn. Dict. Waxen Chatterer, Penn. Brit. Zool. (1812) i. p. 418, pl. liv. Bohemian Waxwing, Selby, Brit. Orn. i. p. 87; Yarr. Brit. B. 2 edit. i. p. 388, fig.

Pl. enl. 261; Gould, B. of Eur. pl. 160.

a, b. Norfolk. From Mr. J. Baker's collection.

#### FAM. V. LANIDÆ.

#### i. LANINÆ.

### 1. LANIUS.

Lanius, Linn. S. N. (1756). Falco (pars), Linn. S. N. (1735). Ampelis (pars), Linn. S. N. (1748). Collyrio, Mahring. Syst. Av. p. 28 (1752). Corvinella, Less. Tr. d'Orn. p. 371 (1831). Basanistes, Licht. (1842).

#### a. LANIUS.

## 1. Lanius excubitor. The Great Grey Shrike.

Lanius excubitor, Linn. S. N. i. p. 135; Temm. Man. d'Orn. 1815, p. 59; Naum. Vog. Deuts. (1822) ii. p. 7, t. 49; Flem. Brit. An. p. 62; Brehm, Vög. Deuts. p. 232, t. xv. f. 6; Jenyn's Man. B. Vert. An. p. 95; Eyton, Cat. Brit. B. p. 7; Macgill. Hist. Brit. B. iii. p. 492; Pr. Bonap. Geogr. Comp. List of B. p. 26; Keys. & Bl. Wirbelth. Eur. p. 60; Schleg. Rev. Crit. des Ois, d'Eur. p. 20; G. R. Gray, Gen. of B. i. p. 290. Lanius cinereus, Leach, Syst. Cat. Mam. & B. B. M. p. 19. Lanius major, Brehm, Voy. Deuts. p. 232. Great Ash-coloured Shrike, Bew. Brit. B. (1797) i. p. 58, fig. Cinereous Shrike, Mont. Orn. Dict. Great Shrike, Penn. Brit. Zool. (1813) i. p. 272, pl. xxxv. Great Cinereous Shrike, Selby, Brit. Orn. i. p. 140. Great Grey Shrike, Yarr. Brit. B. 2 edit. i. p. 156, fig. Pl. enl. 445; Gould, B. of Eur. pl. 66.

a. Wiltshire. Male. From Col. Montagu's collection.

b. Great Britain. Young,

#### 2. ? LANIUS EXCUBITORIDES.

Lanius borealis, Vieill. Ois. d'Amér. Sept. t. 50? Faun. Franc. p. 151, t. 65, f. 1? Smith, Newm. Zoologist, 1849, p. 2495.

Lanius excubitorides, Swains. Faun. Bor. Amer. ii. p. 115? Tomes, Newm. Zoologist, 1850, p. 2734.

Lanius Iudovicianus (Linn.) Aud. Synop. of B. of Amer. p. 158? (Aberdeen and Warwickshire).

#### 2. ENNEOCTONUS.

Enneoctonus, Boie, Isis (1826), p. 973. Phoneus, Kaup, Naturl. Syst. der Eur. Thier. p. 33 (1829). Collurio, Kaup, Naturl. Syst. der Eur. Thier. p. 40 (1829).

## 1. ENNEOCTONUS COLLURIO. The Red-backed Shrike.

Lanius collurio, Linn. S. N. i. p. 136; Temm. Man. d'Orn. 1815, p. 62; Naum. Vög. Deuts. (1822) ii. p. 30, t. 52; Flem. Brit. An. p. 62; Brehm, Vög. Deuts. p. 234; Jenyns, Man. B. Vert. An. p. 96; Eyton, Cat. Brit. B. p. 7; Macgill. Hist. Brit. B. iii. p. 505; Keys. & Bl. Wirbelth. Eur. p. 60; Schleg. Rev. Crit. des Ois. d'Eur. p. 21.

Lanius spinitorquus, Bechst. Naturg. Deuts. ii. p. 1335; Brehm, Vög. Deuts. p. 233.

Lanius dumetorum, Brehm, Vog. Deuts. p. 234.

Enneoctonus collurio, Boie, Isis (1826), p. 973; Pr. Bonap. Geogr. Comp. List of B. p. 26; G. R. Gray, Gen. of B. i. p. 291.

Collurio -, Kaup, Naturl. Syst. p. 40.

The Red-backed Shrike, Bew. Brit. B. (1797) i. p. 60, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 275; Selby, Brit. Orn. i. p. 142; Yarr. Brit. B. 2 edit. i. p. 161, fig.
Woodehat, Bew. (1826) i. p. 75.

Pl. enl, 31, f. 1, 2; Gould, B. of Eur. pl. 69.

a. Wiltshire. Male. From Col. Montagu's collection.

b. Devonshire. Female, young. From Col. Montagu's collection.

c. Cambridgeshire. Male, young. From Mr. J. Baker's collection.
d. Cambridgeshire. Female, young. From Mr. J. Baker's collection.

e. Sternum. England. Presented by T. Ingall, Esq.

f. Sternum. England. Presented by John Ray, Esq.

#### 2. Enneoctonus rufus. The Woodchat Shrike.

Lanius rutilus, Lath. Ind. Orn. i. p. 70; Wood, Analyst, 1835, p. 30.

Lanius pomeranus, Sparrm. Mus. Carsl. t. 1.

Lanius ruficeps, Bechst. Naturg. Deuts. ii. p 1327; Brehm, Vög. Deuts. p. 237.

Lanius ruficollis, Shaw, Gen. Zool. vii. p. 316.

Lanius melanotis, Brehm, Vög. Deuts. p. 238.

Phoneus rufus, Kaup, Naturl. Syst. p. 33.

Enneoctonus rufus, Pr. Bonap. Geogr. Comp. List of B. p. 26; G. R. Gray, Gen. of B. i. p. 291.

Lanius rusus (Briss.) Temm. Man. d'Orn. 1815, p. 61; Leach, Syst. Cat. Mam. & B. B. M. p. 20; Naum. Vög. Deuts. (1822) ii. p. 22, t. 51; Flem. Brit. An. p. 63; Brehm, Vög. Deuts. p. 237; Jenyns, Mun. B. Vert. An. p. 96; Keys. & Bl. Wirbelth. Eur. p. 60; Schleg. Rev. Crit. des Ois. d'Eur. p. 21; Eyton, Cat. Brit. B. p. 66.

B. p. 66.
The Woodchat, Bew. Brit. B. (1797) i. p. 61; Mont. Orn. Dict.;
Penn. Brit. Zool. (1812) i. p. 277; Selby, Brit. Orn. i. p. 145 (note).

The Woodchat Shrike, Yarr. Brit. B. 2 edit. i. p. 167, fig. Wood Shrike, Mont. Orn. Dict. Suppl.

Pl. enl. 9, f. 1, 2; Gould, B. of Eur. pl. 70.

a. Kent. Male.

# Tribe IV. CONIROSTRES.

Picæ, pt.—Passeres, pt., Linn. (1735); Mahr. (1752); Lath. (1790).

Plumipedes, pt., Schæff. (1774).

Fissipedes anisodactyles, conico-tenuirostres—F. a. conico-protensirostres—F. a. conico-convexirostres, pt.—F. a. conico-subulirostres, pt., Schæff. (1774).

Anomalipedes, pt., Schæff. (1774).

Scutipedes, pt.—Negliges, pt.—Chanteurs, pt., Scop. (1777).

Conirostres — Crenirostres, pt. — Dentirostres, pt. — Plenirostres, pt. — Subulirostres, pt. — Lævirostres, pt. — Scansores, pt., Cuv. (1799—1800).

Serrati, pt. — Gregarii, pt. — Passerini, pt. — Dentirostres, pt. — Coraces, pt. — Gallinacei, pt., Illiger (1811).

Coraces-Passerini, pt.. Temm. (1815).

Frugivori - Granivori - Pericalles, pt. - Textores - Leimonites -Carunculata-Paradisei - Coraces - Baccivori, pt.-Colluriones, pt.—Canori, pt.—Anerpontes, pt.—Prioniti, pt.—Ophiophage, Vieill. (1816),

Conirostres-Dentirostres, pt.-Tenuirostres, pt.-Syndactyli, pt.-

Scansores, pt., Cuv. (1817). Dysodes, Vieill. (1818).

Omnivores, pt.-Granivores-Zygodactyli, pt.-Insectivores, pt., Temm. (1820).

Razzolanti, pt.—Alettimorfi—Ifalti, pt.—Plereoramfi—Metrioramfi—Conoramfi, Ranz. (1823).

Conirostres-Dentirostres, pt.-Seansores, pt., Vigors (1826). Vagatrices-Cantatrices, pt.-Deglubitrices, Macgill. (1840).

Oscines, pt., Keys. & Bl. (1840).

Clamatores, pt.—Oscines, pt.—Amphibolæ, Cabanis (1847).

## FAM. I. CORVIDÆ.

## i. GARRULINE.

# 1. GARRULUS.

Garrulus, Briss. Orn. ii. p. 46 (1760). Glaudarius, Koch, Baier. Zool. i. p.

## 1. GARRULUS GLANDARIUS. The Jay.

Corvus glandarius, Linn. S. N. i. p. 157; Temm. Man. d'Orn. 1815. p. 75; Naum. Vög Deuts. (1822) ii. p. 122, t. 58, f. 1.

Lanius glandarius, Nils. Orn. Suec. i. p. 75. Glandarius pictus, Koch, Baier. Zool. i. p. 99.

Garrulus glandarius, Leach, Syst. Cat. Mam. & B. B. M. p. 18; Flem. Brit. An. p. 86; Jenyns, Man. B. Vert. An. p. 148; Eyton, Cat. Brit. B. p. 25; Keys. & Bl. Wirbelth. Eur. p. 45; Schleg. Rev. Crit. des Ois. d'Eur. p. 55; Pr. Bonap. Geogr. Comp. List of B. p. 27; G. R. Gray. Gen. of B. ii. p. 306.

Glandarius germanicus, Brehm, Vög. Deuts. p. 180.

Glandarius septentrionalis, Brehm, Vog. Deuts. p. 180, t. xiii. f. 1. The Jay, Bew. Brit. B. (1797) i. p. 80, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 291; Selby, Brit. Orn. i. p. 79: Yarr. Brit. B. 2 edit. ii. p. 119, fig.

Pl. enl. 481; Gould, B. of Eur. pl. 231.

- a. Devonshire. Male.
- b. Great Britain.
- c. Great Britain. Variety albino. From Mr. Bullock's collection.
- d, e. Oakley Eye, Suffolk. Presented by the Rev. H. Kirby.
- f. Saffron Walden. From Mr. J. Clark's collection.
- g. Skull. England.h. Sternum. England. Presented by John Ray, Esq.
- i. Skull. England. Presented by John Ray, Esq.

#### ii. Corvinæ.

#### 1. NUCIFRAGA.

Nucifraga, Briss. Orn. ii. p. 58 (1760). Caryocatactes, Cuv. Reg. An. (1817), i. p. 399.

#### 1. NUCIFRAGA CARYOCATACTES. The Nutcracker.

Corvus caryocatactes, Linn. S. N. i. p. 157; Temm. Man. d'Orn. 1815, p. 74; Naum. Vög. Deuts. (1822) ii. p. 130, t. 58, f. 2. Caryocatactes maculatus, Koch, Baier. Zool. i. p. 93.

Caryocatactes nucifraga, Nils. Orn. Suec. i. p. 90; Flem. Brit. An. p. 88.

Nucifraga caryocatactes, Leach, Syst. Cat. Mam. & B. B. M. p. 18;
Jenyns, Man. B. Vert. An. p. 149; Eyton, Cat. Brit. B. p. 25;
Macgill. Hist. Brit. B. i. p. 583; Keys. & Bl. Wirbelth. Eur. p. 45; Pr. Bonap. Geogr. Comp. List of B. p. 28; Fisher, Newm. Zool. 1845, p. 824, and 1073, fig.

Nucifraga guttata, Vieill. N. Dict. d'Hist. Nat. v. p. 354.

Nucifraga brachyrhyncha, Brehm, Vög. Deuts. p. 181, t. xiii. f. 2? Zool. 1845, p. 1073, fig. c?

Nucifraga macrorhyncha, Brehm, Vög. Deuts. p. 182.

Caryocatactes caryocatactes (Cuv.), Schleg. Rev. Crit. des Ois. d'Eur. p. 55.

The Nuteracker, Bew. Brit. B. (1797) i. p. 79, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 298, pl. xxxvii.; Selby, Brit. Orn. i. p. 84; Yarr. Brit. B. 2 edit. ii. p. 125, fig. Gould, B. of Eur. pl. 213.

a. Kent. Presented by Wm. George, Esq.

#### 2. PICA.

Pica, Briss. Orn. ii. p. 35 (1760).

# 1. PICA CAUDATA. The Magpie.

Corvus pica, Linu, S. N. i. p. 157; Temm. Man. d'Orn. 1815, p. 73; Naun. Vög. Deuts. (1822) ii. p. 101, t. 56; f. 2.

Pica melavoleuca, Vieill. N. Diet. d'Hist. Nat. xxvi. p. 121;

Macgill, Hist. Brit. B. i. p. 559.

Pica albiventris, Vicill. Faun. Franc. p. 119, t. 55, f. 1.

Pica europæa, (Cuv.), Boie, Isis (1822), p. 551.

Pica rusticorum, Leach, Syst. Cat. Mam. & B. B. M. p. 18.

Pica caudata, Flem. Brit. An. p. 87; Eyion, Cal. Brit. B. p. 25; Pr. Bonap. Geogr. Comp. List of B. p. 27; Keys. & Bl. Wirbelth. Eur. p. 45; G. R. Gray, Gen. of B. ii. p. 314.

Corvus (Pica) pica, Jenyus, Man. B. Vert. An. p. 147.

Pica germanica, Brehm, Ving. Deuts. p. 177.

Pica septentrionalis, Brehm, Vog. Deuts. p. 178.

Pica hiemalis, Brehm, Vog. Deuts. p. 178, t. xii. f. 4.

Pica varia, Schleg. Rev. Crit. des Ois. d'Eur. p. 54.

The Magpie, Bew. Brit. B. (1797) i. p. 75, fig.; Mont. Orn. Dict.;

Penn. Brit. Zool. (1812) i. p. 289; Selby, Brit. Orn. i. p. 76;

Yarr. Brit. B. 2 edit. ii. p. 109, fig.

Pl. enl. 488; Gould, B. of Eur. pl. 216.

a. Devonshire. Male. From Col. Montagu's collection.

b. Cambridgeshire. Young. Presented by Mr. J. Baker.
 c. Sternum. England. Presented by T. Ingall, Esq.

# 3. CORVUS.

Corvus, Linn. S. N. (1735). Lycos, Boie, Isis (1828), p. 358. Monedula, Brehm, Isis (1828), p. 1273. Corone, Kaup, Naturl. Syst. der Eur. Thier. p. 99 (1829). Coloeus, Kaup, Naturl. Syst. der Eur. Thier. p. 114 (1829). Corvultur, Less. Tr. d'Ornith. p. 327 (1831). Frugilegus, Less.

#### a. Corvus.

## 1. Corvus corax. The Raven.

Corvus corax, Linn. S. N. i. p. 155; Temm. Man. d'Orn. 1815, p. 66; Leach, Syst. Cat. Mam. & B. B. M. p. 18; Naum. Vög. Deuts. (1822), ii. p. 43, t. 53, f. 1; Flem. Brit. An. p. 87; Jenyns, Man. B. Vert. An. p. 145; Eyton, Cat. Brit. B. p. 24; Macgill. Hist. Brit. B. i. p. 498; Pr. Bonap. Geogr. Comp. List of B. p. 28; Keys. & Bl. Wirbelth. Eur. p. 46; Schleg. Rev. Crit. des Ois. d'Eur. p. 53; G. R. Gray, Gen. of B. ii. p. 315.

Corvus sylvestris, Brehm, Vog. Deuts. p. 163. Corvus littoralis, Brehm, Vog. Deuts. p. 164. Corvus peregrinus, Brehm, Vog. Deuts. p. 164. Corvus montanus, Brehm, Vog. Deuts. p. 165.

Corvus maximus, Scop.

Corvus clericus, Sparrm. Mus. Carls. t. 2. Corvus leucophæas, Vieill. Gal. des Ois. t. 100.

The Raven, Bew. Brit. B. (1797) i. p. 66, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 279; Selby, Brit. Orn. i. p. 67; Yarr. Brit. B. 2 edit. ii. p. 61, fig.

Pl. enl. 495; Gould, B. of Eur. pl. 220.

a. Cambridgeshire. From Mr. J. Baker's collection.
 b. Sternum. England. Presented by John Ray, Esq.

## b. Lycos.

## 2. Corvus frugilegus. The Rook.

Corvus frugilegus, Linn. S. N. i. p. 156; Temm. Man. d'Orn. 1815, p. 68; Leach, Syst. Cat. Mam. § B. B. M. p. 18; Naum. Vög. Deuts. (1822) ii. p. 78, t. 55; Flem. Brit. An. p. 88; Brehm, Vög. Deuts. p. 170; Jenyns, Man. B. Vert. An. p. 146; Eyton, Cat. Brit. B. p. 24; Macgill. Hist. Brit. B. i. p. 535; Pr. Bonap. Geogr. Comp. List of B. p. 27; Keys. § Bl. Wirbelth. Eur. p. 46; Schleg. Rev. Crit. des Ois. d'Eur. p. 54; G. R. Gray, Gen. of B. ii. p. 315.

Corvus corone, Linn. Faun. Suec. p. 29. Corvus agrorum, Brehm, Vög. Deuts. p. 170. Corvus granorum, Brehm, Vög. Deuts. p. 171. Corvus advena, Brehm, Vög. Deuts. p. 171, t. xii. f. 1. Coloeus frugilegus, Kaup, Naturl. Syst. p. 114. The Rook, Bew. Brit. B. (1797) i. p. 71, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 283; Selby, Brit. Orn. i. p. 72; Yarr. Brit. B. 2 edit. ii. p. 91, fig.

Pl. enl. 484; Gould, B. of Eur. pl. 224.

a. London.

b. Devonshire. Variety. From Col. Montagu's collection.

c, d. Cambridgeshire. Presented by Mr. J. Baker.

e. Samborne Park, Hants. Variety. Presented by Maj.-Gen. Wavell.

f. Sternum. England. Presented by T. Ingall, Esq.

#### 3. Corvus Monedula. The Jackdaw.

Corvus monedula, Linn. S. N. i. p. 156; Temm. Man. d'Orn. 1815, p. 70; Leach, Syst. Cat. Man. & B. B. M. p. 18; Naum. Vög. Deuts. (1822) ii. p. 93, t. 56, f. 1; Flem. Brit. An. p. 88; Jenyns, Man. B. Vert. An. p. 147; Eyton, Cat. Brit. B. p. 24; Macgill. Hist. Brit. B. i. p. 552; Pr. Bonap. Geogr. Comp. List of B. p. 27; Keys. & Bl. Wirbelth. Eur. p. 45; Schleg. Rev. Crit. des Ois. d'Eur. p. 54; G. R. Gray, Gen. of B. ii. p. 315.

Monedula turricum, Brehm, Vög. Deuts. p. 172. Monedula arborea, Brehm, Vög. Deuts. p. 173, t. xii. f. 2. Monedula septentrionalis, Brehm, Vög. Deuts. p. 173. Coloeus monedula, Knup, Naturl. Syst. p. 114.

Lycos monedula, Boie.

The Jackdaw, Bew. Brit. B. (1797) i. p. 73, fig.; Mont. Orn. Dict.; Penn. Brit. Zonl. (1812) i. p. 296, pl. xxxv. upp. fig.; Selby, Brit. Orn. i. p. 75; Yarr. Brit. B. 2 edit. ii. p. 103, fig. Pl. enl. 523; Gould, B. of Eur. pl. 223.

a. Wiltsbire. Male. From Col. Montagu's collection.

b. Yorkshire. Variety.

c. Saffron Walden. From Mr. J. Clark's collection.

d, e. Cambridgeshire. Chicks. From Mr. J. Baker's collection.

f. Skull. England. Presented by John Ray, Esq.

## c. CORONE.

# 4. CORVUS CORONE. The Carrion Crow.

Corvus corone, Linn. S. N. i. p. 155; Temm. Man. d'Orn. 1815, p. 67; Naum. Vög. Deuts. (1822) n. p. 54, t. 53, f. 2; Flem. Brit.

An. p. 87; Brehm, Vög. Deuts. p. 166; Jenyns, Man. B. Vert. An. p. 145; Eyton, Cat. Brit. B. p. 24; Macgill. Hist. Brit. B. i. p. 516; Pr. Bonap. Geogr. Comp. List of B. p. 28; Keys. & Bl. Wirbelth. Eur. p. 46; Schleg. Rev. Crit. des Ois. d'Eur. p. 53; G. R. Gray, Gen. of B. ii. p. 315.

Corvus cornix, Leach, Syst. Cat. Mam. & B. B. M, p. 18.

Corvus subcorone, Brehm, Vog. Deuts. p. 167.

Corvus hiemalis, Brehm, Vög. Deuts. p. 167. Corone ———, Kaup, Naturl. Syst. p. 99.

The Carrion Crow, Bew. Brit. B. (1797) i. p. 68; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 281, pl. xxxv. f. lower; Selby, Brit. Orn. i. p. 69; Yarr. Brit. B. 2 edit. ii. p. 78, fig. Pl. enl. 483; Gould, B. of Eur. pl. 221.

- a. Variety (albino). From Mr. Bullock's collection.
- b. Cambridgeshire. From Mr. J. Baker's collection.
- c. Sternum. England. Presented by John Ray, Esq.

#### 5. Corvus cornix. The Hooded Crow.

Corvus cornix, Linn. S. N. i. p. 156; Temm. Man. d'Orn. 1815, p. 67; Naum. Vöy. Deuts. (1822) ii. p. 65, t. 54, f. 1; Flem. Brit. An. p. 87; Brehm, Vöy. Deuts. p. 168; Jenyns, Man. B. Vert. An. p. 146; Eyton, Cat. Brit. B. p. 24; Macgill. Hist. Brit. B. i. p. 529; Pr. Bonap. Geogr. Comp. List of B. p. 28; Keys. & Bl. Wirbelth. Eur. p. 46; Schleg. Rev. Crit. des Ois. d'Eur. p. 54; G. R. Gray, Gen. of B. ii. p. 315.

Corvus cinereus, Leach, Syst. Cat. Mam. & B. B. M. p. 18; Brehm,

Vög. Deuts. p. 169.

Corvus subcornix, Brehm, Vög. Deuts. p. 168. Corone cornix, Kaup, Naturl. Syst. p. 99.

The Hooded Crow, Bew. Brit. B. (1797) i. p. 69, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 286; Selby, Brit. Orn. i. p. 71; Yarr. Brit. B. 2 edit. ii. p. 82.

Pl. enl. 79; Gould, B. of Eur. pl. 222.

- a. Wiltshire. Male. From Col. Montagu's collection.
- c. Great Britain. Young, variety.

d. Great Britain. Young.

e. Cambridgeshire. Presented by Mr. J. Baker.

f. Cambridgeshire. Female. From Mr. J. Baker's collection.

g. Sternum. England. Presented by John Ray, Esq.

## iii. Pyrrhocoracinæ.

#### 1. CORACIA.

Coracia, Briss. Orn. ii. p. 3 (1760), Graculus, Koch, Baier. Zool. i. p. 91 (1816). Fregilus, Cuv. Règ. An. (1817) i. p. 406.

## 1. CORACIA GRACULA. The Chough.

Corvus graculus, Linn. S. N. i. p. 158; Temm. Man. d'Orn. 1815, p. 72; Naum. Vög. Deuts. (1822) ii. p. 114, t. 57, f. 2.

Coracia erythroramphos, Vieill. N. Dict. d'Hist. Nat. viii. p. 2. Pyrrhocorax graculus, Temm. Man. d'Orn. (1820) i. p. 122; Brehm, Vög. Deuts. p. 174, t. xii. f. 3; Flem. Brit. An. p. 89.

Fregilus graculus, Cuv. Rėg. An. (1817) i. p. 406; Jenyns, Man. B. Vert. An. p. 144; Eyton, Cat. Brit. B. p. 23; Macgill. Hist. Brit. B. i. p. 585; Pr. Bonap. Geogr. Comp. List of B. p. 28; Keys. & Bl. Wirbelth. Eur. p. 46; Schleg. Rev. Crit. des Ois. d'Eur. p. 56.

Fregilus europæus, Less. Tr. d'Orn. p. 324.
Fregilus erythropus, Swains. Classif. of B. ii. p. 268.
Pyrrhocorax rupestris, Brehm, Vög. Deuts. p. 175.
Coracia gracula, G. R. Gray, Gen. of B. ii. p. 321.
Corvus docilis, Gmel. S. N. i. p. 385.
Corvus eremita, Gmel. S. N. i. p. 375.

Graculus eremita, Koch, Baier. Zool. i. p. 91.

Corvus coracias, Lapeir.

The Red-legged Crow, Bew. Brit. B. (1797) i. p. 77; Mont. Orn.

Dict.; Penn. Brit. Zool. (1812) i. p. 294, pl. xxxvi.

The Cornish Chough, Selby, Brit. Orn. i. p. 81. The Chough, Yarr. Brit. B. 2 edit. ii. p. 55, fig.

Pl. enl. 255; Gould, B. of Eur. pl. 219.

a. Great Britain. From Col. Montagu's collection. b, c. Cornwall. Presented by D. W. Mitchell, Esq.

#### FAM. II. STURNIDÆ.

## i. Graculinæ.

#### 1. GRACULA.

Gracula, Linn. S. N. (1756).
Eulabes, Cuv. Règ. Anim. (1817) i. p. 401.
Mainates, Less. Tr. d'Orn. p. 356 (1831).
Maina, Hodgs. (1836).
Mino, Less. Voy. de la Coqu. Zool. (1828).
Gymnops, Cuv. Règ. Anim. (1829) i. p. 381 (1829).
Ampeliceps, Blyth, Journ. A. S. B. (1842) p. 194.

#### a. GRACULA.

#### 1. GRACULA BELIGIOSA. The Minor Grakle.

Gracula religiosa, Linn. S. N. p. 164; Cater, Zoologist, 1849, p. 2391.

Pl. enl. 268.

(Coast of Norfolk).

# ii. Sturninæ.

## 1. PASTOR.

Pastor, Temm. Man. d'Orn. (1815) p. 82. Psaroïdes, Vieill. Analyse, p. 42 (1816). Thremmaphilus, Macgill. Hist. Brit. B. i. p. 160 (1837). Boscis, Brehm, Isis (1828), p. 1282. Nomadites, Peteniz (183?). Merula, Naum. Vög. Deuts. (1822) ii. p. 206.

## 1. PASTOR ROSEUS. The Rose-coloured Pastor.

Turdus roseus, Linn. S. N. i. p. 294.
Sturnus roseus, Scop. Ann. i. No. 191.
Turdus seleucis, Gmel. S. N. i. p. 837.
Pastor roseus, Temm. Man. d'Orn. 1815, p. 83; Flem. Brit. An. p. 66; Jenyns, Man. B. Vert. An. p. 144; Eyton, Cat. Brit. B. p. 23; Schleg. Rev. Crit. des Ois. d'Eur. p. 58; G. R. Gray, Gen. of B. ii. p. 334.

Merula rosea (Briss), Naum. Vog. Deuts. (1822) ii. p. 206, t. 63; Keys, & Bl. Wirbelth, Eur. p. 47.

Boseis rosea, Brehm, Vog. Deuts. p. 401, t. xxii. f. 4.

Thremmaphilus roseus, Macgill. Hist. Brit. B. iii. p. 613.

Acridotheres roseus, Ranz. Elem. Zool. iii. t. 17, f. 4; Pr. Bonap. Geogr. Comp. List of B. p. 28.

The Rose-coloured Ouzel, Bew. Brit. B. (1797) i. p. 91: Mont. Orn. Diet.; Penn. Brit. Zool. (1812) i. p. 413, pl. liii.

Rose-coloured Pastor, Selby, Brit. Orn. i. p. 94: Yarr. Brit. B. 2

edit. ii. p. 48, fig.

Gould, B. of Eur. pl. 212.

a. Devoushire.

#### 2. STURNUS.

Sturbus, Linn. S. N. (1735).

## 1. STURNUS VULGARIS. The Common Starling.

Sturnus valgaris, Linn. S. N. i. p. 200; Temm. Man. & Orn. 1815. p. 81; Leuch, Syst. Cat. Mam. & B. B. M. p. 17; Naum. Vog. Deuts. (1822) ii. p. 187, t. 62; Flem. Brit. An. p. 86; Jenynes. Man. B. Vert. An. p. 143; Eyton, Cat. Brit. B. p. 23; Pr. Bonap George, Comp. List of B. p. 28; Krys. 4 Bl. Wirbelth. Eur. p. 46; Schleg. Rev. Crit. des Ois. d'Eur. p. 57; G. R. Gray, Gen. of B. u. p. 337.

Stumus varius, Wolf u. Mey. Tambenh. i. p. 208. Sturnus guttatus, Margill. Hint. Brit. B. i. p. 595.

Turbus selitarius, Gord. S. N. i. p. 834.

Sturmus solitarius, Louch, Syst. Cat. Mam. & B. B. M. p. 18.

Starmus demesticus, Brehm, Vog. Druts, p. 398. Starmus selvestris, Bookas, Vog. Druts, p. 398, t. xxii. f. 3.

Sturnus nitens, Fleram, Vog. Deuts. p. 330).

Sturnus septembienulis, Broken, Ving. Deuts. p. 400.

The Starling, Berr. Brit. B. (1797) i. p. 88, fig.

Stare or Starling, Mont. Orn. Dict.

Solitary Thrush, Mont. Orn. Diet. Suppl. pl.

Common Stare, Poun. Brit Zoul (1812) i p. 306, pl. 4. low. fig. Common Starling, Selby, Brit. Orn. i. p. 92; Yarr. Brit. B. 4 ABL II p. 40, Bg.

Pl cal. 75; Godd, B. of Eur. pl. 210.

a Saffron Waltier Adult From Mr. J. Clark's collection.

A England. Presented by A. Cooper, Esq., R.A.

c. Somersetshire. Variety.

d. Wiltshire. Variety. From Col. Montagu's collection.
e, f. Cambridgeshire. Young. Presented by Mr. J. Baker.
g, h. Cambridgeshire. Young. From Mr. J. Baker's collection.

i. Sternum. England. Presented by T. Ingall, Esq.

#### iii. Agelainæ.

#### 1. AGELAIUS.

Agelaius, Vieill. Analyse, &c., p. 33 (1816).

1. AGELAIUS PHŒNICEUS. The Red-winged Starling.

Oriolus phœniceus, Linn. S. N. i. p. 161.

Sturnus predatorius, Wils. Amer. Orn. pl. 30, f. 1, 2; Lubb, Fauna of Norf. p. 36.

Agelaius phœniceus, Vieill. N. Dict. d'Hist. Nat. 34, p. 539; G. R. Gray, Gen. of B. ii. p. 347.

Icterus phoeniceus, Pr. Bonap. Syn. of Amer. B. p. 52. The Red-winged Starling, Bew. Brit. B. (1797) ii. p. 35, fig.; Lubb. Fauna of Norf. p. 36; Yarr. Brit. B. 2 edit. ii. p. 35, fig.

Pl. enl. 402.

(Shepherd's Bush, and Rollesby Broad).

## FAM. III. FRINGILLIDÆ.

- i. Coccothraustinæ.
- 1. COCCOTHRAUSTES.

Coccothraustes, Briss. Orn. iii. pt. 1, p. 218 (1760).

The Hawfinch. 1. COCCOTHRAUSTES VULGARIS.

Loxia coccothraustes, Linn. S. N. i. p. 299; Leach, Syst. Cat. Mam. & B. B. M. p. 13.

Fringilla coccothraustes, Temm. Man. d'Orn. 1815, p. 203; Naum. Vög. Deuts. (1824) iv. p. 435, t. 114; Jenyns, Man. B. Vert. An. p. 136.

ĸ 2

Coccothraustes vulgaris, Steph. Gen. Zool. xiv. p. 86; Flem. Brit. An. p. 82; Eyton, Cat. Brit. B. p. 21; Pr. Bonap. Geogr. Comp. List of B. p. 30; Keys. & Bl. Wirbelth, Eur. p. 42; Schleg. Rev. Crit. des Ois. d'Eur. p. 65; G. R. Gray, Gen. of B. ii. p. 358.

Coccothraustes fagorum, Brehm, Vög. Deuts. p. 256.

Coccothraustes cerasorum, Brehm, Vog. Deuts. p. 256, t. xvi. f. 6.

Coccothraustes planiceps, Brehm, Vog. Deuts. p. 258.

Coccothraustes atrigularis, Macgill. Hist. Brit. B. i. p. 356.

The Grosbeak, Bew. Brit. B. (1797) i, p. 133, fig.

Haw-Grosbeak, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 421.

Hawfinch, Selby, Brit. Orn. i. p. 262; Yarr. Brit. B. 2 edit. i. p. 531, fig.

Pl. enl. 99, 100; Gould, B. of Eur. pl. 199.

a. Greenwich. Presented by Mr. I. T. Hudson.

b. Hampstead Road. Presented by Mr. Ingham. c, d. Cambridgeshire. Young. Presented by Mr. J. Baker.

e. Turnham Green. Male. From Mr. J. Baker's collection. f. Turnham Green. Female. From Mr. J. Baker's collection.

g. Sternum. England. Presented by T. Ingall, Esq. h. Two Skulls. England. Presented by John Ray, Esq.

# ii. Fringillinæ.

## 2. FRINGILLA.

Fringilla, Linn. S. N. (1735).

Struthus, Boie, Isis (1826), p. 974.

Calebs, Cuv. Anat. Comp. i. Tab. Sec. Cl. des Ois. (1799-1800).

Carduelis, Briss. Ornith. iii. pt. 1, p. 53 (1760).

Acanthis, Meyer (1815).

Lozops, Cabanis, Ornith. Notiz. ii. p. 330 (1847).

Emblema, Gould, Proc. Z. S. 1842, p. 17. Chrysomitris, Boie, Isis (1828), p. 322.

Spinus, Brehm, Isis (1828), p. 1277.

Spinus, Koch, Baier. Zool. (1816).

Citrinella, Pr. Bonap. Geogr. Comp. List of B. p. 34 (1838).

Dryospiza, Keys. & Bl. Wirbelth. Eur. p. 41 (1840).

Serinus, Brehm, Isis (1828), p. 1276.

Ligurinus, Koch, Baier, Zool. p. (1816).

Chloris, Mahr. Av. Gen. p. 41 (1752).

Chlorospiza, Pr. Bonap. Sagg. Distr. Met. Anim. Vert. (1832).

Petronia, Kaup, Naturl. Syst. der Eur. Thier. p. 158 (1829).

Gymnornis, Hodgs. Gray's Zool. Miscell. p. 84 (1844).
Gannabina, Brehm, Isis (1828), p. 1277.
Linota, Pr. Bonap. Geogr. Comp. List of B. p. 34 (1838).
Leucosticte, Swains. Fauna Bor. Amer. ii. p. 493 (1831).
Montifringilla, Brehm, Isis (1828), p. 1277.
Chionospiza, Kaup, Naturl. Syst. der Eur. Thier. p. 139 (1829).
Orites, Keys. & Bl. Wirbelth. Eur. p. 42 (1840).
Fringilauda, Hodgs. As. Res. xix. p. 158 (1836).
Nephæa, Audub. Synop. B. of Amer. p. (1839).
Struthus, Pr. Bonap. (1838).

#### a. FRINGILLA.

## 1. FRINGILLA CÆLEBS. The Chaffinch.

Fringilla celebs, Linn. S. N. i. p. 318; Temm. Man. d Orn. 1815, p. 218; Leach, Syst. Cat. Mam. & B. B. M. p. 15; Naum. Vög. Deuts. (1826), v. p. 13, t. 118; Flem. Brit. An. p. 83; Brehm, Vög. Deuts. p. 272; Jenyns, Man. B. Vert. An. p. 133; Eyton, Cat. Brit. B. p. 20; Maegill. Hist. Brit. B. i. p. 329; Pr. Bonap. Geogr. Comp. List of B. p. 31; Keys. & Bl. Wirbelth. Eur. p. 42; Schleg. Rev. Crit. des Ois. d Eur. p. 41; G. R. Gray, Gen. of B. ii. p. 371.

Struthus cælebs, Boie, Isis (1826), p. 974.
Fringilla hortensis, Brehm, Vög. Deuts. p. 272.
Fringilla sylvestris, Brehm, Vög. Deuts. p. 273.
Fringilla nobilis, Brehm, Vög. Deuts. p. 273.

Passer spiza, Pall. Zoogr. ii. p. 17.

The Chaffinch, Bew. Brit. B. (1797) i. p. 160, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 452; Selby, Brit. Orn. i. p. 269; Yarr. Brit. B. 2 edit i. p. 507, fig.

Pl. enl. 54, f. 1; Gould, B. of Eur. pl. 187.

a. Great Britain. Male. b. Great Britain. Male.

c. Devonshire. Female. From Col. Montagu's collection.

d. Great Britain. Variety.

e. Saffron Walden. From Mr. J. Clark's collection.

f. Cambridgeshire.
 g. Saffron Walden.
 h. Cambridgeshire.
 Young.
 Presented by Mr. J. Baker.
 Yery young.
 Presented by Mr. J. Baker.
 Presented by Mr. J. Baker.

i. Sternum. England. Presented by T. Ingall, Esq.

j. Skull. England. Presented by John Ray, Esq.

#### 2. FRINGILLA MONTIFRINGILLA. The Mountain Finch.

Fringilla montifringilla, Linn. S. N. i. p. 318; Temm. Man. d'Orn. 1815, p. 229; Leuch, Syst. Cat. Mam. & B. B. M. p. 14; Naum. Vog. Deuts. (1826) v. p. 44, t. 119; Flem. Brit. An. p. 84; Brehm, Vog. Deuts. p. 275; Jenyns, Man. B. Vert. An. p. 134; Eyton, Cat. Brit. B. p. 20; Macgill. Hist. Brit. B. i. p. 335; Pr. Bonap, Geogr. Comp. List of B. p. 31; Keys. & Bl. Wirbelth, Eur. p. 42; Schleg. Rev. Crit. des Ois. d'Eur. p. 61; G. R. Gray, Gen. of B. ii. p. 371.

Fringilla lulensis, Linn. Faun. Suec. p. 86. Fringilla flammea, Beseke, Vog. Curl. p. 79.

Fringilla septentrionalis, Brehm. Vog. Deuts. p. 274. Struthus montifringilla, Boie, Isis (1828) p. 323.

The Mountain Finch, Bew. Brit. B. (1797) i. p. 163, fig. : Yarr. Brit. B. 2 edit. i. p. 512, fig.

Brambling or Bramble, Mont. Orn. Dict.

Brambling Finch, Penn. Brit. Zool. (1812) i. p. 454. Mountain Finch, Selby, Brit. Orn. i. p. 272.

Pl. enl. 54, f. 2; Gould, B. of Eur. pl. 188.

- a. Devonshire, Male. From Col. Montagu's collection. b. Cornwall. Male. From Col. Montagu's collection.
- c. Great Britain. Female. From Col. Montagu's collection.

d. Saffron Walden. From Mr. J. Clark's collection.

e. Epping. Presented by H. Doubleday, Esq.

- f. Cambridgeshire. Male. From Mr. J. Baker's collection. q. Cambridgeshire. Female. From Mr. J. Baker's collection.
- Sternum. England. Presented by T. Ingall, Esq.
   Sternum. England. Presented by John Ray, Esq.

i. Skull. England. Presented by John Ray, Esq.

## b. CARDUELIS.

## 3. FRINGILLA CARDUELIS. The Goldfinch.

Fringilla carduelis, Linn. S. N. i. p. 318; Temm. Man. d'Orn. 1815, p. 229; Leach, Syst. Cat. Mam. & B. B. M. p. 15; Naum, Vög. Deuts. (1826) v. p. 126, t. 124, f. 1, 2; Flem. Brit. An. p. 85; Jenyns, Man. B. Vert. An. p. 137; Schleg. Rev. Crit. des Ois. d'Eur. p. 63; G. R. Gray, Gen. of B. ii. p. 371.

Spinus Carduelis, Koch, Baier. Zool. i. p. 233. Cardnelis carduelis, (Cur.) Boie, Iris (1822), p. 554.

Carduelis elegans, Steph. Gen. Zool. xiv. p. 30; Macgill. Hist. Brit. B. i. p. 393; Pr. Bonap. Geogr. Comp. List of B. p. 33.

Carduelis aurata, Eyton, Cat. Brit. B. p. 20.
Carduelis septentrionalis, Brehm, Vög. Deuts. p. 288.
Carduelis germanicus, Brehm, Vög. Deuts. p. 289, t. xviii. f. 7.
Fringilia (Acanthis) carduelis, Keys. & Bl. Wirbelth. Eur. p. 61.
The Goldfinch, Bew. Brit. B. (1797) i. p. 165, fig.; Mont. Orn.
Dict.; Penn. Brit. Zool. (1812) i. p. 447; Selby, Brit. Orn. i.
p. 584; Yarr. Brit. B. 2 edit. i. p. 539, fig.
Pl. enl. 4, f. 1; Gould, B. of Eur. pl. 196.

- a. Devonshire. Male. From Col. Montagu's collection.
- b. London. Variety.c. London. Female.
- d. Brighton. Variety.
- e. Great Britain.
- f. London. Female.
- g. Saffron Walden. Young. From Mr. J. Clark's collection. h, i. Cambridgeshire. Very young. Presented by Mr. J. Baker.
- j. Sternum. England. Presented by T. Ingall, Esq.

#### c. Chrysomitris.

# 4. FRINGILLA SPINUS. The Siskin. Fringilla spinus, Linn. S. N. i. p. 322; Temm. Man. d'Orn. 1815,

p. 225; Naum. Vög. Deuts. (1826) v. p. 155, t. 125; Flem. Brit. An. p. 85; Jenyns, Man. B. Vert. An. p. 137; Schleg. Rev. Crit. des Ois. d'Eur. p. 63; G. R. Gray, Gen. of B. ii. p. 371. Linaria spinus, Leach, Syst. Cat. Mam. & B. B. M. p. 15; Eyton, Cat. Brit. B. p. 20.

Spinus viridis, Koch, Baier. Zool. i. p. 235.
Serinus spinus, Boie, Isis (1822), p. 555.
Spinus alnorum, Brehm, Vög. Deuts. p. 284.
Spinus medius, Brehm, Vög. Deuts. p. 286, t. xviii. f. 6.
Carduelis spinus, Steph. Gen. Zool. xiv. p. 33; Macgill. Hist. Brit. B. i. p. 400.
Chrysomitris spinus, Boie, Isis (1828), p. 322; Pr. Bonap. Geogr.

Comp. List of B. p. 33.

Fringilla (Acanthis) spinus, Keys. & Bl. Wirbelth. Eur. p. 41.

The Siskin, Bew. Brit. B. (1797) i. p. 167, fig.; Selby, Brit. Orn.
i. p. 282; Yarr. Brit. B. 2 edit. i. p. 544, fig.

Siskin Finch, Penn. Brit. Zool. (1812) i. p. 459, fig. upp.

Pl. enl. 485, f. 3; Gould, B. of Eur. pl. 197.

- a. Loudon. Male. From Col. Montagu's collection.
- b. London. Female. Presented by J. F. Stephens, Esq.
- c. Great Britain.
- d. Turnham Green. Male. From Mr. J. Baker's collection.
- e. Turnham Green. Female. From Mr. J. Baker's collection.

## d. LIGURINUS.

#### 5. FRINGILLA CHLORIS. The Greenfinch.

Loxia chloris, Linn. S. N. i, p. 304.

Fringilla chloris, Temm. Man. d'Orn. (1815) p. 206; Leach, Syst. Cat. Mam. & B. B. M. p. 14; Naum. Vog. Deuts. (1826) v. p. 62, t. 120; Jenyns, Man. B. Vert. An. p. 136; Keys. & Bl. Wirbelth. Eur. p. 42; Schleg. Rev. Crit. des Ois, d'Eur. p. 61; G. R. Gray, Gen. of B. ii. p. 371.

Ligurinus chloris, Koch, Baier. Zool. i. p. 230.

Serinus chloris, Boie, Isis (1822), p. 555.

Coccothraustes chloris, Steph. Gen. Zool. ziv. p. 87; Flem. Brit. An. p. 83; Eyton, Cat. Brit. B. p. 21.

Chloris pinetorum, Brehm, Vög. Deuts. p. 259, t. xvii. f. 1.

Chloris hortensis, Brehm, Vag. Deuts. p. 260.

Chloris septentrionalis, Brehm, Vog. Deuts. p. 261. Linaria chloris, Macgill. Hist. Brit. B. i. p. 366.

Chlorospiza chloris, Pr. Bonap. Geogr. Comp. List of B. p. 30; Macgill, Man. N. H. Ornith, i. p. 204.

Green Grosbeak, Bew. Brit. B. (1797) i. p. 136, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 432.

Greenfinch, Selby, Brit. Orn. i. p. 263; Yarr. Brit. B. 2 edit. i. p. 527, fig.

Pl. enl. 267, f. 2; Gould, B. of Eur. pl. 200.

- a. Devonshire. Male. From Col. Montagu's collection.
- b. Great Britain.
- c. Kent. Variety.
- d. Great Britain.

e. Hampshire. Presented by Mr. G. L. Scott.

f, g. Cambridgeshire. Young. Presented by Mr. J. Baker.
h. Saffron Walden. Young. From Mr. J. Clark's collection.
i. Cambridgeshire. Very young. Presented by Mr. J. Baker.
j. Sternum. England. Presented by T. Ingall, Esq.
k. Sternum. England. Presented by John Ray, Esq.

#### e. Cannabina.

#### 6. FRINGILLA CANNABINA. The Common Linnet.

Fringilla cannabina, Linn. S. N. i. p. 322; Temm. Man. d'Orn. 1815, p. 215; Naum. Vög. Deuts. (1826) v. p. 80, t. 121; Flem. Brit. An. p. 84; Jenyns, Man. B. Vert. An. p. 139; Keys. & Bl. Wirbelth. Eur. p. 41; Schleg. Rev. Crit. des Ois. d'Eur. p. 63; G. R. Gray, Gen. of B. ii. p. 372.

Fringilla linota, Gmel. S. N. i. p. 916.

Passer papaverina, Pall. Zoogr. ii. p. 27.

Ligurinus cannabina, Koch, Baier. Zool. i. p. 231.

Linaria cannabina, Boie, Isis (1822), p. 554; Eyton, Cat. Brit. B.

p. 21; Macgill. Hist. Brit. B. i. p. 371.

Cannabina pinetorum, Brehm, Vög. Deuts. p. 276. Cannabina arbustorum, Brehm, Vög. Deuts. p. 277.

Linota cannabina, Pr. Bonap. Geogr. Comp. List of B. p. 54; Macgill. Man. N. H. Ornith. i. p. 199.

The Greater Redpole, Bew. Brit. B. (1797) i. p. 173; Mont. Orn.

Dict.

Red-headed Finch, Penn. Brit. Zool. (1812) i. p. 464.

Common or Brown Linnet, Selby, Brit. Orn. i. p. 274.

Linnet, Bew. Brit. B. (1797) i. p. 171.

The Common Linnet, Yarr. Brit. B. 2 edit. i. p. 550, fig.

Pl. enl. 485, f. 1, 151, f. 1, 2; Gould, B. of Eur. pl. 191.

- a, b. Great Britain. Male.
- c. Devoushire. Female.
- d. Great Britain.
- e. London. Variety. Presented by J. F. Stephens, Esq..

f. Devonshire. Albino variety.

g. Great Britain. Albino variety.

h, i. Saffron Walden. From Mr. J. Clark's collection.

j, k. Cambridgeshire. Young. Presented by Mr. J. Baker.

l. Sternum. England. Presented by John Ray, Esq.

## 7. FRINGILLA LINARIA. The Lesser Redpole.

Fringilla linaria, Linn. S. N. i. p. 332; Naum. Vög. Deuts. (1826)
v. p. 173, t. 126; Flem. Brit. An. p. 85; Jenyns, Man. B. Vert.
An. p. 138; Schleg. Rev. Crit. des Ois. d'Eur. p. 63; G. R. Gray, Gen. of B. ii. p. 372.

Linaria minor, Leach, Syst. Cat. Mam. & B. B. M. p. 15.

Fringilla (Acanthis) linaria, Keys. & Bl. Wirbelth. Eur. p. 41.

Spinus linaria, Koch, Baier. Zool. i. p. 233.

Linota linaria, Pr. Bonap, Geogr, Comp. List of B. p. 34; Macgill. Man. N. H. Ornith. i. p. 201.

Fringilla rufescens, Vieill. Mem. dell. Acad. dell. Sci. de Torino, xxiii. p. 204.

Linaria flavirostris, Eyton, Cat. Brit. B. p. 21; Macgill. Hist. Brit.

B. i. p. 379.

Linaria Holbœllii, Brehm, Vög. Deuts. p. 280. Linaria alnorum, Brehm, Vög. Deuts. p. 281. Linaria agrorum, Brehm, Vög. Deuts. p. 281. Linaria betularum, Brehm, Vög. Deuts. p. 282. Linaria flavirostris, Brehm, Vög. Deuts. p. 282. Linaria linaria, Boie, Isis (1822), p. 554. Linaria rubra, Steph. Gen. Zool. xiv. p. 29.

Lesser Redpole, Bew. Brit. B. (1797) i. p. 174, fig.; Mont. Orn. Dict.; Yarr. Brit. B. 2 edit. i. p. 562, fig.

Less Red-headed Finch, Penn. Brit. Zool. (1812) i. p. 466.

Lesser Redpole Finch, Selby, Brit. Orn. i. p. 279. Pl. enl. 485, f. 2; Gould, B. of Eur. pl. 194.

a. Bath. Male. From Col. Montagu's collection.
b. Bath. Female. From Col. Montagu's collection.
c. Cambridgeshire. From Mr. J. Baker's collection.
d. Sternum. England. Presented by T. Ingall, Esq.

## 8. FRINGILLA BOREALIS. The Mealy Redpole.

Fringilla borealis, Roux, Ornit. Prov. i. p. 165, t. 101, 102; Temm. Man. d'Orn. iii. p. 264; G. R. Gray, Gen. of B. ii. p. 372. Linaria canescens, Gould, Eyton, Cat. Brit. B. p. 20.

Fringilla cauescens, Schleg. Rev. Crit. des Ois. d'Eur. p. 63.

Linaria borealis, Selby, Newcastle Nat. Hist. Trans. i. p. 263;
Macgill. Hist. Brit. B. i. p. 388.

Fringilla (Acanthis) borealis, Keys. & Bl. Wirbelth. Eur. p. 41. Linota canescens, Pr. Bonap. Geogr. Comp. List of B. p. 34. Fringilla linaria, var. \(\beta\). Jenyns, Man. B. Vert. An. p. 139. Linota borealis, Macgill. Man. N. H. Ornith. i. p. 201. The Mealy Redpole, Yarr. Brit. B. 2 edit. i. p. 557, fig.

Gal. des Ois. t. 65; Gould, B. of Eur. pl. 193.

a. London. Presented by —— Prentis, Esq. b, c. Inverness. From Mr. J. Baker's collection.

#### 9. FRINGILLA FLAVIROSTRIS. The Mountain Linnet.

Fringilla flavirostris, Linn. S. N. i. p. 322; Keys. & Bl. Wirbelth. Eur. p. 61; Schleg. Rev. Crit. des Ois. d'Eur. p. 62; G. R. Grav. Gen. of B. ii. p. 372.

Fringilla montium, Gmel. S. N. i. p. 917; Naum. Vog. Deuts. (1826) v. p. 103, t. 122; Flem. Brit. An. p. 84; Jenyns, Man. B. Vert. An. p. 140.

Linaria montium, Leach, Syst. Cat. Mam. & B. B. M. p. 15. Fringilla cannabina (part), Temm. Man. d'Orn. 1815, p. 216.

Cannabina montium, Brehm, Vog. Deuts. p. 278, t. xvii. f. 4.

Cannabina flavirostris, Brehm, Vög. Deuts. p. 278.

Cannabina media, Brehm, Vög. Deuts. p. 279.

Linota montium, Pr. Bonap. Geogr. Comp. List of B. p. 34; Macgill. Man. N. H. Ornith. i. p. 200.

Linaria flavirostris, Macgill. Hist. Brit. B. i. p. 379.

Twite, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 467, pl. lx. low. fig.

Mountain Linnet or Twite, Selby, Brit. Orn. i. p. 278; Yarr. Brit. B. 2 edit. i. p. 569, fig.

Gould, B. of Eur. pl. 192.

Male. a. Norfolk.

b. Orkney. From Mr. J. Baker's collection.

#### 3. PASSER.

Passer, Briss. Orn. iii. pt. 1, p. 71 (1760). Pyrgita, Cuv. Règ. An. 1817, i. p. 385.

## 1. Passer domesticus. The House Sparrow.

Fringilla domestica, Linn. S. N. i. p. 323; Temm. Man. d'Orn. 1815, p. 210; Naum. Vög. Deuts. (1824) iii. p. 544, t. 115; Jenyns, Man. B. Vert. An. p. 134.

Passer domesticus, Leach, Syst. Cat. Mam. & B. B. M. p. 13; Macgill. Hist. Brit. B. i. p. 340; Keys. & Bl. Wirbelth. Eur. p. 60; Schleg. Rev. Crit. des. Ois. d'Eur. p. 64; G. R. Gray, Gen. of B. ii. p. 372.

Pyrgita domestica, Boie, Isis (1822), p. 554; Flem. Brit. An. p. 83; Brehm, Vog. Deuts. p. 264; Eyton, Cat. Brit. B. p. 19; Pr.

Bonap. Geogr. Comp. List of B. p. 31.

Pyrgita pagorum, Brehm, Vög. Deuts. p. 265.

Pyrgita rustica, Brehm, Vog. Deuts. p. 266, t. xvii. f. 2.

The House Sparrow, Bew. Brit. B. (1797) i. p. 154, fig.; Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 265; Yarr. Brit. B. 2 edit. i. p. 521, fig.

Sparrow Finch, Penn. Brit. Zool. (1812) i. p. 456, pl. lviii. Pl. enl. 6, f. 1, 55, f. 1; Gould, B. of Eur. pl. 184, f. 1.

a. Devonshire. From Col. Montagu's collection.

Variety. From Col. Montagu's collection. b. Devoushire.

c. London. Variety.

d. London. Variety. Presented by J. F. Stephens, Esq. e. Great Britain. Variety. From Col. Montagu's collection.

f. Great Britain. Very young. g, h. London. Very young. Varieties.

i. Cambridgeshire. Very young. Presented by Mr. J. Baker. j. Sternum. England. Presented by T. Ingall, Esq.

## 2. PASSER MONTANUS. The Tree Sparrow.

Fringilla montana, Linn. S. N. i. p. 324; Temm. Man. d'Orn. 1815, p. 212; Naum. Vog. Deuts. (1824) iv. p. 480, t. 116; Jenyns, Man. B. Vert. An. p. 135.

Loxia hamburgia, Gmel. S. N. i. p. 854. Passer montanina, Pall. Zoogr. ii. p. 30.

Passer montanus, Steph. Gen. Zool, xiv. p. 40; Macgill. Hist. Brit. B. i. p. 351; Keys. & Bl. Wirbelth. Eur. p. 39; Schleg. Rev. Crit. des Ois. d'Eur. p. 64; G. R. Gray, Gen. of B. ii. p. 372.

Passer hamburgensis, Leach, Syst. Cat. Mam. & B. B. M. p. 14. Pyrgita montana, Boie, Isis (1822), p. 554; Flem. Brit. An. p. 83; Brehm, Vog. Deuts, p. 268; Eyton, Cat. Brit. B. p. 19; Pr. Bonap. Geogr. Comp. List of B. p. 31.

Pyrgita campestris, Brehm, Vög. Deuts. p. 267.

Pyrgita septentrionalis, Brehm, Vög. Deuts. p. 268. The Mountain Sparrow, Bew. Brit. B. (1797) i. p. 158, fig.

Tree Sparrow, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 458, pl. lix. upp. fig.; Selby, Brit. Orn. i. p. 267; Yarr. Brit. B. 2 edit. i. p. 516, fig.

Gould, B. of Eur. pl. 184, f. 2.

a. Lincolnshire. Male. From Col. Montagu's collection.

b. Sternum. England. Presented by John Ray, Esq.

#### 4. SPIZA.

Spiza, Pr. Bonap. Syn. B. of U. S. p. 106 (1828). Passerina, Vieill. Analyse, &c., p. 30 (1816). Paroaria, Pr. Bonap. Sagg. Distr. Met. An. Vert. (1832). Calyptrophorus, Cabanis, Ornith. Notiz. p. 329 (1847).

#### a. Spiza.

#### 1. SPIZA CIRIS. The Painted Bunting.

Emberiza ciris, Linn. S. N. i. p. 313; Jenyns, Man. B. Vert. An. p. 133; Flem. Brit. An. p. 78.

Spiza ciris, Pr. Bonap. Geogr. Comp. List of B. p. 35; G. R. Gray, Gen. of B. ii. p. 375.

Painted Bunting, Mont. Orn. Dict. Suppl. (with White-winged Grosbeak).

Edwards, Birds, pl. 130, 273. (? Portland Island).

## iii. Emberizinæ.

#### 1. EMBERIZA.

Emberiza, Linn. S. N. (1748).
Fringilla, Linn. S. N. (1735).
Cynchramus, Boie, Isis (1826), p. 974.
Cia, Kaup, Naturl. Syst. der Eur. Thier. p. 138 (1829).
Citrinella, Kaup, Naturl. Syst. der Eur. Thier. p. 142 (1829).
Orospina, Kaup, Naturl. Syst. der Eur. Thier. p. 154 (1829).
Cirlus, Kaup, Naturl. Syst. der Eur. Thier. p. 153 (1829).
Spina, Kaup, Naturl. Syst. der Eur. Thier. p. 153 (1829).
Spinus, Mahring, Gen. Av. p. 41 (1752).
Miliaria, Brehm, Isis (1828), p. 1278.

#### a. MILIARIA.

# I. EMBERIZA MILIARIA. The Common Bunting.

Emberiza miliaria, Linn. S. N. î. p. 308; Temm, Man. d'Orn.
1815, p. 180; Leach, Syst. Cat. Mam. § B. B. M. p. 16; Naum.
Vög. Deuts. (1824) iv. p. 213, t. 101, f. 1; Flem. Brit. An. p. 77;
Jenyns, Man. B. Vert. An. p. 130; Eyton, Cat. Brit. B. p. 18;
Maegill. Hist. Brit. B. i. p. 438; Keys. § Bl. Wirbelth. Eur.
p. 39; Schleg. Rev. Crit. des Ois. d'Eur. p. 71; G. R. Gray,
Gen. of B. ii. p. 377.

Miliaria septentrionalis, Brehm, Vög. Deuts. p. 291. Miliaria germanica, Brehm, Vög. Deuts. p. 292.

Miliaria peregrina, Brehm, Vig. Deuts. p. 292, t. xix, f. 1.

Cynchramus miliaria, Pr. Bonap. Geogr. Comp. List of B, p. 35.

The Bunting, Bew. Brit. B. (1797) i. p. 141.

Common Bunting, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 435; Selby, Brit. Orn. i. p. 239; Yarr. Brit. B. 2 edit. i. p. 479, fig.

Gould, B. of Eur. pl. 171.

a. Wiltshire. From Col. Montagu's collection.

b. Middlesex. Variety. Presented by N. A. Vigors, Esq.

c. Epping. Presented by Henry Doubleday, Esq. d, e. Cambridgeshire. From Mr. J. Baker's collection.

f. Sternum. England. Presented by T. Ingall, Esq. q. Sternum. England. Presented by John Ray, Esq.

## b. CYNCHRAMUS.

# 2. EMBERIZA SCHENICLUS. The Black-headed Bunting.

Emberiza schæniclus, Linn. S. N. i. p. 311; Temm. Man. d'Orn. 1815, p. 181; Leach, Syst. Cat. Mam. & B. B. M. p. 16; Naum. Vög. Deuts. (1824) iv. p. 280, t. 105; Flem. Brit. An. p. 78; Jenyns, Man. B. Vert. An. p. 130; Eyton, Cat. Brit. B. p. 18; Macgill. Hist. Brit. B. i. p. 453; Pr. Bonap. Geogr. Comp. List of B. p. 36; Keys. & Bl. Wirbelth. Eur. p. 39; Schleg. Rev. Crit. des Ois. d'Eur. p. 70; G. R. Gray, Gen. of B. ii. p. 377.

Emberiza arundinacea, S. G. Gmel. Reise, ii. p. 175.

Emberiza passerina, Gmel. S. N. i. p. 871. Cynchramus schemiclus, Boie, Isis (1826), p. 974; Brehm, Vög. Deuts. p. 302. Cynchramus stagnatilis, Brehm, Vög. Deuts. p. 301. Cynchramus septentrionalis, Brehm, Vög. Deuts. p. 302, t. xix. f. 3.

The Black-headed Bunting, Bew. Brit. B. (1797) i. p. 145, fig.; Yarr. Brit. B. 2 edit. i. p. 484, fig.

Reed Bunting, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 440; Selby, Brit. Orn. i. p. 242.

Pl. enl. 247, f. 2, 497, f. 2; Gould, B. of Eur. pl. 183.

a. Wiltshire. Male. From Col. Montagu's collection.
b. Wiltshire. Female. From Col. Montagu's collection.
c—d. Cambridgeshire. From Mr. J. Baker's collection.

#### c. CITRINELLA.

## 3. EMBERIZA CITRINELLA. The Yellow Bunting.

Emberiza citrinella, Linn. S. N. i. p. 309; Temm. Man. d'Orn. 1815, p. 178; Leach, Syst. Cat. Mam. & B. B. M. p. 16; Naum. Vög. Deuts. (1824) iv. p. 234, t. 102, f. 1, 2; Flem. Brit. An. p. 77; Brehm, Vög. Deuts. p. 294; Jenyms, Man. B. Vert. An. p. 131; Eyton, Cat. Brit. B. p. 18; Macgill. Hist. Brit. B, i. p. 445; Pr. Bonap. Geogr. Comp. List of B. p. 36; Keys. & Bl. Wirbelth. Eur. p. 39; Schleg. Rev. Crit. des Ois. d'Eur. p. 68; G. R. Gray, Gen. of B. ii. p. 377.

Emberiza sylvestris, Brehm, Vög. Deuts. p. 294. Emberiza septentrionalis, Brehm, Vög. Deuts. p. 294.

Citrinella -, Kaup, Naturl. Syst. p. 142.

Yellow Bunting, Bew. Brit. B. (1797) i. p. 143, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 437, pl. lv. upp. fig.; Selby, Brit. Orn. i. p. 241; Yarr. Brit. B. 2 edit. i. p. 490, fig.

Pl. enl. 30, f. 1; Gould, B. of Eur. pl. 176.

a. Wiltshire.
b. Wiltshire.
c. Wiltshire.
d. From Col. Montagu's collection.
variety.
From Col. Montagu's collection.

d. Saffron Walden. From Mr. J. Clark's collection.
 e. Cambridgeshire. Presented by Mr. J. Baker.
 f. Epping. Presented by Henry Doubleday, Esq.

g, h. Saffron Walden, Very young. From Mr. J. Clark's collection.
i, j. Cambridgeshire. Very young. Presented by Mr. J. Baker.
k. Cambridgeshire. Adult. From Mr. J. Baker's collection.

# 4. EMBERIZA HORTULANA. The Ortolan Bunting.

 Emberiza hortulana, Linn. S. N. i. p. 309; Temm. Man. d'Orn.
 1815, p. 183; Naum. Vög. Deuts. (1824) iv. p. 258, t. 103;
 Brehm, Vög. Deuts. p. 296; Jenyns, Man. B. Vert. An. p. 133; Macgill. Hist. Brit. B. i. p. 457; Pr. Bonap. Geogr. Comp. List of B. p. 36; Keys. & Bl. Wirbelth. Eur. p. 38; Schleg. Rev. Crit. des Ois, d' Eur. p. 49; G. R. Gray, Gen. of B. ii. p. 377.

Emberiza chlorocephala, Gmel. S. N. i. p. 887. Emberiza Tunstallii, Lath. Ind. Orn. i. p. 418. Emberiza Malbeyensis, Sparrm. Mus. Carls. t. 1. Emberiza badensis, Gmel. S. N. i. p. 873. Emberiza citrinella, var., Flem. Brit. An. p. 77. Emberiza pinguescens, Brehm, Vög. Deuts. p. 295. Citrinella hortulana, Kaup, Naturl. Syst. p. 142. Green-headed Bunting, Mont. Orn. Dict. The Ortolan Bunting, Yarr. Brit. B. 2 edit. i. p. 502.

Brown, Illustr. pl. 30; Gould, B, of Eur. pl. 176. (Mary-la-bone Fields and off Coast of Yorkshire).

## d. CIRLUS.

## 5. EMBERIZA CIRLUS. The Cirl Bunting.

Emberiza cirlus, Linn. S. N. i. p. 311; Temm. Man. d'Orn. 1815, p. 185; Leach, Syst. Cat. Mam. & B. B. M. p. 16; Naum. Vog. Deuts. (1824) iv. p. 251, t. 102, f. 3, 4; Flem. Brit. An. p. 77; Brehm, Vog. Deuts. p. 297; Jenyns, Man. B. Vert. An. p. 131; Eyton, Cat. Brit. B. p. 18; Macgill. Hist. Brit. B. i. p. 450; Pr. Bonap. Geogr. Comp. List of B. p. 36; Keys. & Bl. Wirbelth. Eur. p. 38; Schleg. Rev. Crit. des Ois. d'Eur. p. 68; G. R. Gray. Gen. of B. ii. p. 377.

Emberiza eleathorax, Bechst. Naturg. Deuts. iii. p. 292; Brehm. Vog. Deuts. p. 297.

Cirlus - Kaup, Naturl. Syst. p. 153.

Cirl Bunting, Mont. Orn. Diet. & Suppl. pl.; Penn. Brit. Zool. (1812), i. p. 438, pl. lvii.; Selby, Brit. Orn. i. p. 245; Yarr. Brit. B. 2 edit. i. p. 495.

Pl. enl. 653, f. 1, 2; Gould, B. of Eur. pl. 175.

a. Devonshire. Male. From Col. Montagu's collection.

b. Somersetshire. Female. From Col. Montagu's collection.

#### 2. PLECTROPHANES.

Plectrophanes, Meyer (1815?). Centrophanes, Kaup, Naturl. Syst. der Eur. Thier. p. 158 (1829). Hortulanus, Leach, Syst. Cat. Mam. & B. B. M. p. 15 (1815).

## a. PLECTROPHANES.

## I. PLECTROPHANES NIVALIS. The Snow Bunting.

Emberiza nivalis, Linn. S. N. i. p. 308; Temm. Man. d'Oru. 1815, p. 188; Naum. Vog. Deuts. (1824) iv. p. 297, t. 106; Flem. Brit. An. p. 78; Jenyns, Man. B. Vert. An. p. 128.

Emberiza montana, Gmel. S. N. i. p. 867. Emberiza glacialis, Lath. Ind. Orn. i. p. 398. Emberiza mustelina, Gmel. S. N. i. p. 867.

Hortulanus glacialis, Leach, Syst. Cat. Mam. & B. B. M. p. 15. Hortulanus montanus, Leach, Syst. Cat. Mam. & B. B. M. p. 16.

Plectrophanes nivalis, Meyer, Eyton, Cat. Brit. B. p. 19; Macgill. Hist. Brit. B. i. p. 460; Pr. Bonap. Geogr. Comp. List of B. p. 36; Keys. & Bl. Wirbelth. Eur. p. 38; Schleg. Rev. Crit. des Ois. d'Eur. p. 72; G. R. Gray, Gen. of B. ii, p. 379.

Plectrophanes borealis, Brehm, Vog. Deuts. p. 305. Pleetrophanes montanus, Brehm, Vog. Deuts. p. 305. Plectrophanes mustelinus, Brehm, Vög. Deuts. p. 306.

Snow Bunting, Bew. Brit. B. (1797) i. p. 148; Mont. Orn. Diet. ; Selby, Brit. Orn. i. p. 247; Yarr. Brit. B. 2 edit. i. p. 470, fig.

Tawny Bunting, Bew. Brit. B. (1797) i. p. 150, fig.; Mont. Orn. Diet. ; Penn. Brit. Zool. (1813) i. p. 442. Pl. enl. 497, f. 1, 511, f. 2; Gould, B. of Eur. pl. 170. a. Great Britain. Winter.

b. Devonshire. Female. From Col, Montagu's collection. c. Devoushire. Young. From Col. Montagu's collection. d-e. Great Britain.

f.g. Two Sterna. England. Presented by T. Ingall, Esq. h. Sternum. England. Presented by John Ray, Esq. i. Skull. England. Presented by John Ray, Esq.

#### b. CENTROPHANES.

## 2. PLECTROPHANES LAPPONICA. The Lapland Bunting.

Emberiza lapponica, Nils. Ornith. Suec. i. p. 157; Naum. Vög. Deuts. (1824) iv. p. 319, t. 108; Jenyns, Man. B. Vert. An. p. 128.

Fringilla calcarata, Pall. It. ii. p. 710.

Fringilla lapponica, Gmel. S. N. i. p. 900.

Emberiza calcarata, Temm. Man. d'Orn. (1815) p. 190.

Centrophanes lapponica, Kaup, Naturl. Syst. p. 158.

Pleetrophanes lapponica, Selby, Linn. Trans. xv. p. 156, pl. 1; Eyton, Cat. Brit. B. p. 19; Maegill. Hist. Brit. B. i. p. 469; Pr. Bonap. Geogr. Comp. List. of B. p. 36; Keys. & Bl. Wirbelth. Eur. p. 38; G. R. Gray, Gen. of B. ii. p. 379.

Plectrophanes calcaratus, Meyer. Boie, İsis (1822), p. 554; Brehm, Vög. Deuts. p. 306; Schleg. Rev. Crit. des Ois. d'Eur. p. 72.

The Lapland Bunting, Yarr. Brit. B. 2 edit. i. p. 465, fig.; Eyton, R. Brit. B. p. 95, fig.

Gould, B. of Eur. pl. 169.

(London Market, Brighton and Lancashire, &c.).

## iv. ALAUDINÆ.

## 1, ALAUDA.

Alauda, Linn. S. N. (1735),
Galerida, Boie, Isis (1828), p. 321.
Lullula, Kaup, Naturl. Syst. der Eur. Thier. p. 92 (1829).
Calandrella, Kaup, Naturl. Syst. der Eur. Thier. p. 30 (1829).
Calendula, Swains. Classif. of B. ii. p. 292 (1837).
Erana, G. R. Gray, List of Gen. of B. (1840) p. 48.
Heterops, Hodgs. Gray's Zool. Misc. p. 84 (1844).

## a. ALAUDA.

## 1. ALAUDA ARVENSIS. The Skylark.

Alauda arvensis, Linn. S. N. i. p. 287; Temm. Man. d'Orn. 1815, p. 161; Naum. Vög. Deuts. (1824) iv. p. 166, t. 100, f. 1; Flem. Brit. An. p. 79; Brehm, Vög. Deuts. p. 320; Jenyns, Man. B. Vert. An. p. 127; Eyton, Cat. Brit. B. p. 16; Macgill. Hist. Brit. B. ii. p. 163; Pr. Bonap. Geogr. Comp. List of B. p. 37; Keys. & Bl. Wirbelth. Eur. p. 36; Schleg. Rev. Crit. des Ois. d'Eur. p. 59; G. R. Gray, Gen. of B. ii. p. 380.

Alauda vulgaris, Leach, Syst. Cat. Mam. & B. B. M. p. 21.

Alauda coelipeta, Pall. Zoogr. i. p. 524. Alauda segetum, Brehm, Vög. Deuts. p. 318.

Alauda montana, Brehm, Vog. Deuts. p. 319, t. xx. f. 1.

Alauda agrestis, Brehm, Vog. Deuts. p. 320.

Alauda italica, Gmel. S. N. i. p. 793.

The Skylark, Bew. Brit. B. (1797) i. p. 178, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 475; Selby, Brit. Orn. i. p. 221; Yarr. Brit. B. 2 edit. i. p. 447, fig.

Pl. enl. 363, f. 1; Gould, B. of Eur. pl. 166.

a. Wiltshire. From Col. Montagu's collection.

b. Great Britain. Pale coloured.

c. Great Britain. Albino. From Col. Montagu's collection.

d. Great Britain. Albino.

e. Great Britain. Black variety.

f. Great Britain. Variegated.
g. Great Britain. Black variety.

h. Cambridgeshire. Young. Presented by Mr. J. Baker.

i. Cambridgeshire. Very young. Presented by Mr. J. Baker. j. Cambridgeshire. Very young. Presented by Mr. J. Baker.

k. Skull. England. Presented by John Ray, Esq. l. Sternum. England. Presented by John Ray, Esq.

## b. Galerida.

## 2. ALAUDA ARBOREA. The Wood Lark.

Alauda arborea, Linn. S. N. i. p. 287; Temm. Man. d'Orn. 1815, p. 162; Naum. Vög. Deuts. (1824) iv. p. 192, t. 100, f. 2; Flem. Brit. An. p. 79; Jenyns, Man. B. Vert. An. p. 127; Eyton, Cat. Brit. B. p. 16; Macgill. Hist. Brit. B. ii. p. 174; Keys. & Bl. Wirbelth. Eur. p. 36; Schleg. Rev. Crit. des Ois. d'Eur. p. 59; G. R. Gray, Gen. of B. ii. p. 380.

Alauda nemorosa, Gmel. S. N. i. p. 797. Alauda cristatella, Lath. Ind. Orn. i. p. 499. Lullula arborea, Kaup, Naturl. Syst. p. 92. Galerida nemorosa, Brehm, Vög. Deuts. p. 316. Galerida arborea, Brehm, Vög. Deuts. p. 317; Pr. Bonap. Geogr.

Comp. List of B. p. 37.

Wood Lark, Bew. Brit. B. (1797) i. p. 183, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 479; Selby, Brit. Orn. i. p. 224; Yarr. Brit. B. 2 edit. i. p. 459, fig.

Lesser Crested Lark, Mont. Orn. Dict.; Penn. Brit. Zool. (1812)

i. p. 487.

Pl. enl. 503, f. 2; Gould, B. of Eur. pl. 167.

a. Wiltshire. From Col. Montagu's collection.

b. Sternum. England. Presented by John Ray, Esq.

## 3. ALAUDA CRISTATA. The Crested Lark.

Alauda cristata, Linn. S. N. i. p. 288; Temm. Man. d'Orn. 1815, p. 159; Naum. Vög. Deuts. (1824) iv. p. 134, t. 99, f. 1; Pall. Zoogr. i. p. 523; Keys. & Bl. Wirbelth. Eur. p. 36; Schleg. Rev. Crit. des Ois. d'Eur. p. 59; G. R. Gray, Gen. of B. ii. p. 380.

Alauda galerita, Pall. Zoogr. i. p. 524.

Alauda undata, Gmel. S. N. i. p. 797.

Galerida cristata, Boie, Isis (1828), p. 321; Brehm, Vog. Deuts. p. 315; Pr. Bonap. Geogr. Comp. List of B. p. 37.

Galerida viarum, Brehm, Vog. Deuts. p. 315.

Galerida undata, Boic, Isis (1828), p. 321; Brehm, Vog. Deuts. p. 316.

Lullula cristata, Kaup, Naturl. Syst. p. 92.

The Crested Lark, Yarr. Brit. B. 2 edit. i. p. 455, fig.

Pt. enl. 503, f. 1, 662; Gould, B. of Eur. pl. 165. (Ireland).

## c. CALANDRELLA.

## 4. ALAUDA BRACHYDACTYLA. The Short-toed Lark.

Alauda brachydactyla, Leisl. Ann. d. Wetter. Gesell. iii. p. 357, t. 19; Temm. Man. d'Orn. 1815, p. 164; Naum. Vög. Deuts. (1824) ii. p. 188, t. 98, f. 2; Schleg. Rev. Crit. des Ois. d'Eur. p. 59; G. R. Gray, Gen. of B. ii. p. 380.

Alauda arenaria, Vieill. Fauna Franc. p. 169, t. 74, f. 1, 2

Alauda pispoletta, Pall. Zoogr. i. p. 526.

Melanocorypha arenaria, Pr. Bonap, Geogr. Comp. List of B. p. 38. Phileremos brachydactyla, Keys. & Bl. Wirbelth. Eur. p. 37. Calandrella brachydactyla, Kaup, Naturl. Syst. p. 39.

Melanocorypha itala, Brehm, Vög. Deuts. p. 311.

Melanocorypha brachydactyla, Brehm, Vög. Deuts. p. 311. Alauda calandrella, Bon.; Savi, Ornit. Tosc. ii. p. 67. Short-toed Lark, Yarr. Brit. B. 2 edit. i. p. 463, fig. Gould, B. of Eur. pl. 163. (Shrewsbury).

#### 2. OTOCORIS.

Otocoris, Pr. Bonap. (1839). Eremophila, Boie, Isis (1828), p. 1278. Phileremos, Brehm, Vög. Deuts. p. 312. (1831). Philamnus, G. R. Gray, List of Gen. of B. (1840) p. 47.

# Otocoris alpestris. The Shore Lark. Alauda alpestris, Linn. S. N. i. p. 289; Temm. Man. d'Orn. 1815,

p. 160; Naum. Vög. Deuts. (1824) iv. p. 149, t. 99, f. 2, 3; Jenyns, Man. B. Vert. An. p. 126; Eyton, Cat. Brit. B. p. 16; Macgill. Hist. Brit. B. ii. p. 159; Schleg. Rev. Crit. des Ois. d'Eur. p. 60. Otocoris alpestris, G. R. Gray, Gen. of B. ii. p. 382. Alauda flava, Gmel. S. N. i. p. 800. Alauda nivalis, Pall. Zoogr. i. p. 519. Eremophila cornuta, Boie, Isis (1828), p. 322. Alauda cornuta, Swains. Ann. Phil. (1827), p. 434. Alauda chrysolaema, Wagl. Phileremos alpestris, Brehm, Vög. Deuts. p. 313; Pr. Bonap. Geogr. Comp. List of B. p. 37; Keys. & Bl. Wirbelth. Eur. p. 37. The Shore Lark, Eyton, R. Brit. B. p. 15, fig.; Yarr. Brit. B. 2 edit. i. p. 440, fig.

Pl. enl. 650, f. 2; Wilson, Amer. Orn. pl. 5, f. 4; Gould, B. of Eur. pl. 164.

(Norfolk, Lincolnshire and Kent).

## v. Pyrrhulinæ.

#### 1. PYRRHULA.

Pyrrhula, Mahring, Gen. Av. p. 40 (1752).

## 1. Pyrrhula Rubicilla. The Bulfinch.

Loxia Pyrrhula, Linn. S. N. i. p. 300. Emberiza coccinea, Sander. Naturf. Geselc. xiii. p. 199. Fringilla pyrrhula, Temm. Man. d'Orn. 1815, p. 200. Pyrrhula europæa, Leach, Syst. Cat. Mam. & B. B. M. p. 13.

Pyrrhula rubicilla, Pall. Zoogr. ii. p. 7; Keys. & Bl. Wirbelth. Eur.

p. 40; G. R. Gray, Gen. of B. ii. p. 387.

Pyrrhula vulgaris, Temm. Man. d'Orn. (1820) p. 338; Naum. Vög. Deuts. (1824) iv. p. 383, t. 111, f. 1-3; Flem. Brit. An. p. 82; Jenyns, Man. B. Vert. An. p. 140; Eyton, Cat. Brit. B. p. 22; Pr. Bonap. Geogr. Comp. List of B. p. 38; Schleg. Rev. Crit. des Ois, d'Eur, p. 46,

Pyrrhula rufa, Koch, Baier. Zool. i. p. 227. Pyrrhula major, Brehm, Vog. Deuts. p. 252.

Pyrrhula germanicus, Brehm, Vög. Deuts. p. 252, t. xvi. f. 4.

Pyrrhula peregrina, Brehm, Vog. Deuts. p. 253. Pyrrhula pileata, Macgill. Hist. Brit. B. i. p. 407.

Bullfinch, Bew. Brit. B. (1797) i. p. 138, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 430; Yarr. Brit. B. 2 edit. i. p. 574, fig.

Bulfinch Grosbeak, Selby, Brit. Orn. i. p. 258.

Pl. enl. 145; Gould, B. of Eur. pl. 209.

a. Devonshire. From Col. Montagu's collection.

b. Great Britain.

c. Devonshire. Female. From Col. Montagu's collection.

d. Devonshire. Black variety. From Col. Montagu's collection,
 e. Middlesex. White variety.

f. Cambridgeshire. Young. Presented by Mr. J. Baker.

g. Two skulls. England. h. Sternum. England. Presented by T. Ingall, Esq.

## 2. STROBILOPHAGA.

Strobilophaga, Vieill. Analyse, &c., p. 29 (1816). Corythus, Cuv. Reg. An. (1817) i. p. 391. Pinicola, Vieill. Ois. d'Amer. Septr. i. p. 4 (1807). Densirostra, Wood (18 ?).

## 1. STROBILOPHAGA ENUCLEATOR. The Pine Grosbeak.

Loxia enucleator, Linn. S. N. i. p. 299. Fringilla enucleator, Temm. Man. d'Orn. 1815, p. 198.

Loxia psittacea, Pall,

Loxia flamingo, Sparr. Mus. Carls. t. 17, var.

Pyrrhula enucleator, Temm. Man. d'Orn. (1820) i. p. 333; Naum. Vog. Deuts. (1824) iv. p. 403, t. 112; Jenyns, Man. B. Vert. An. p. 141; Schleg. Rev. Crit. des Ois, d'Eur. p. 47.

Strobilophaga enucleator, Vieill. N. Dict. Hist. Nat. ix. p. 609; G.

R. Gray, Gen. of B. ii. p. 387.

Pyrrhula (Corythus) enucleator, Keys. & Bl. Wirbelth. Eur. p. 40. Corythus enucleator, Cuv. Règ. An. (1816) i. p. 415; Flem. Brit. An. p. 76; Brehm, Vög. Deuts. p. 247; Eyton, Cat. Brit. B. p. 22; Macgill. Hist. Brit. B. i. p. 411; Pr. Bonap. Geogr. Comp. List of B. p. 38.

Corythus angustirostris, Brehm, Vög. Deuts. p. 247.

The Pine Grosbeak, Bew. Brit. B. (1797) i. p. 135, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 423, pl. liv. low. fig.; Selby, Brit. Orn. i. p. 256; Yarr. Brit. B. 2 edit. ii. p. 581, fig.

Edwards, Birds, pl. 123, 124; Gould, B. of Eur. pl. 204; Pl. enl. 135, f. 1.

(Aberdeenshire, Lancashire and Harrow-on-the-Hill).

# vi. LOXINÆ.

Loxia, Linn. S. N. (1735). Curvirostra, Scop. (1777). Crucirostra, Cuv. Compar. i. Tab. Sec. Cl. des Ois. (1799-1800).

## 1. LOXIA CURVIROSTRA. The Common Crossbill.

Loxia curvirostra, Linn. S. N. i. p. 299; Temm. Man. d'Orn. 1815, i. p. 195; Naum. Vög. Deuts. (1824) iv. p. 356, t. 110, f. 1—3; Flem. Brit. An. p. 76; Jenyns, Man. B. Vert. An. p. 141; Eyton, Cat. Brit. B. p. 22; Pr. Bonap. Geogr. Comp. List of B. p. 68; Keys. & Bl. Wirbelth. Eur. p. 41; Schleg. Rev. Crit. des Ois. d'Eur. p. 68; G. R. Gray, Gen. of B. ii. p. 388.

Crucirostra europæa, Leach, Syst. Cat. Mam. & B. B. M. p. 12.

Crucirostra abietina, Meyer, B. Liv. und Esthland. p. 72. Crucirostra media, Brehm, Vög. Deuts. p. 242.

Cracirostra media, Brehm, Vog. Deuts. p. 242. Cracirostra montana, Brehm, Vög. Deuts. p. 243. Cracirostra pinetorum, Brehm, Vög. Deuts. p. 244.

Loxia europæa, Macgill. Hist. Brit. B. i. p. 417.

The Crossbill, Bew. Brit. B. (1797) i. p. 130, fig.; Mont. Orn. Dict.

Cross-billed Grosbeak, Penn. Brit. Zool. (1812) i. p. 425.

Common Crossbill, Selby, Brit. Orn. i. p. 251; Yarr. Brit. B, 2 edit. ii. p. 1, fig.

Pl. enl. 218; Gould, B. of Eur. pl. 202.

a. Cambridgeshire. Male. Presented by Mr. J. Baker. b. Somerset. Male. From Col. Montagu's collection.

c. Devonshire. Female. From Col. Montagu's collection. d-f. Saffron Walden. From Mr. J. Clark's collection. g. Turnham Green. From Mr. J. Baker's collection. h. Sternum. England. Presented by John Ray, Esq.

i. Skull. England. Presented by John Ray, Esq.

### 2. Lonia Pytiopsittacus. The Parrot Crossbill.

Loxia pytiopsittacus, Bechst. Taschenb. Deuts. iii. p. 106; Temm. Man. d'Orn. 1815, p. 193; Naum. Vog. Deuts. (1824) iv. p. 339, t. 109; Flem. Brit. An. p. 76; Jenyns, Man. B. Vert. An. p. 142; Eyton, Cat. Brit. B. p. 22; Macgill. Hist. Brit. B. i. p. 429; Pr. Bonap. Geogr. Comp. List of B. p. 38; Keys. & Bl. Wirbelth. Eur. p. 42; Schleg. Rev. Crit. des Ois, d'Eur. p. 67; G. R. Gray, Gen. of B, ii. p. 388.

Crucirostra pinetorum, Meyer, Vog. Liv. u. Esthl. i. p. 317. Crucirostra pytiopsittacus, Brehm, Vog. Deuts. p. 241. Crucirostra subpytiopsittacus, Brehm, Vog. Deuts. p. 242.

Parrot Crossbill, Selby, Brit. Orn. i. p. 254; Yarr. Brit. B. 2 edit. ii. p. 24, fig.

Gould, B. of Eur. pl. 201.

(Shropshire, Epping Forest and Scotland).

#### 3. LOXIA LEUCOPTERA. The White-winged Crossbill.

Loxia leucoptera, Gmel. S. N. i. p. 844; Jenyns, Man. B. Vert. An. p. 143; Eyton, Cat. Brit. B. p. 22; Macgill. Hist. Brit. B. iii. p. 689; Pr. Bonap. Geogr. Comp. List of B. p. 38; Keys. & Bl. Wirbelth, Eur. p. 42.

Loxia falcirostra, Lath. Ind. Orn. i. p. 371; Temp. Linn. Trans. vii. p. 309; Flem. Brit. An. p. 76; G. R. Gray, Gen. of B. ii. p.

388.

Loxia curvirostra, pt. Naum. Vög. Deuts. iv. t. 110, f. 4.

Loxia bifasciata, Nils.

Crucirostra bifasciata, Brehm, Vog. Deuts. p. 244.

Loxia tanioptera, Glog.

Crucirostra tænioptera, Brehm, Viog. Deuts. p. 244.

The White-winged Crossbill, Penn. Brit. Zool. (1812) i. p. 428; Yarr. Brit. B. 2 edit. ii. p. 28, fig.; Eyton, R. Brit. B. p. 21,

White-winged Grosbeak, Mont. Orn. Dict. Suppl.

Wils. Am. Orn. pl. 31, f. 3; Bonap. Amer. Orn. pl. 15, f. 3; Gould, B. of Eur. p. 203.

(Belfast, Worcester, Ipswich and Scotland).

## ORDER III. SCANSORES.

Accipitres, pt. Mach. (1752).
Picæ, pt. Linn. (1735); Machr. (1752); Lath. (1790).
Plumipedes, pt. Schaff. (1774).
Fissipedes isodactyles, pt. Schaff. (1774).
Retipedes, pt. — Psittaces — Scutipedes, pt. — Negliges, pt. Scop. (1777).
Scansores, Cuv. (1795—1796) (1799—1800) (1817); Temm. (1815).
Keys. & Bl. (1840).
Cuneirostres, pt.—Lævirostres, pt. Cuv. (1799—1800).
Psittacini—Serrati, pt.—Amphiboli—Sagittilingues, Illiger (1811).
Psittacini — Macroglossi — Barbati, pt. — Imberbi — Pteroglossi, Vicill. (1816).
Zygodactyli, Temm. (1820).

## FAM. I. PICIDÆ.

Rampicanti — Antilambani — Chenoramfi — Pogonofori — Agenii —

Beloglossi, Ranz. (1823). Scansores, Vigors. (1826).

Scandrices—Cuculatrices, Macgill. (1840).

## i. PICINÆ.

### 1. PICOIDES.

Picoides, Lacep. Mem. de l'Instit. (1800—1801). Tridactylia, Steph. Gen. Zool. ix. p. 218, xiv. p. 173 (1815). Apternus, Swains. Fauna Bor. Amer. ii. p. 302 (1831).

1. Picoides Tridactylus. The Northern Three-toed Woodpecker.

Picus tridactylus, Linn. S. N. i. p. 177; Temm. Man. d'Orn. 1815, p. 246; Naum. Vög. Deuts. (1826) v. p. 346, t. 137; Jenyns, Man. B. Vert. An. p. 151; Schleg. Rev. Crit. des Ois. d'Eur. p. 50; Eyton, Cat. Brit. B. p. 66.
Picus hirsutus, Vieill. Ois. d'Amer. Septr. t. 124.
Dryobates tridactylus, Boie, Isis (1828), p. 326.
Tridactylia hirsuta, Steph. Gen. Zool. ix. p. 219.

Picus (Apternus) tridactylus, Swains. Fauna Bor. Amer. p. 311. pl. 56: Keys. & Bl. Wirbelth. Eur. p. 35.

Picoïdes alpinus, Brehm, Vog. Deuts. p. 194.

Picoïdes montanus, Brehm, Vog. Deuts. p. 194, t. xiv. f. 1.

Picoïdes tridactylus, Kaup, Naturl. Syst. p. 135; G. R. Gray, Gen. of B. ii. p. 434.

Apternus americanus, Swains. Classif, of B. ii, p. 306.

Apternus tridactylus (Sw.), Pr. Bonap. Geogr. Comp. List of B.

Edwards' Birds, pl. 114; Donovan, Brit. B. vi, pl. 143; Gould, B. of Eur. pl. 232.

(North of Scotland).

### 2. PICUS.

Picus, Linn. S. N. (1735).

Dryobates, Boie, Isis (1826), p. 977.

Dendrocopus, Koch, Baier. Zool. i. p. (1816).

Dendrodromas, Kaup, Naturl. Syst. der Eur. Thier. p. 136 (1829)

## 1. Picus Major. The Great Spotted Woodpecker.

Picus major, Linn. S. N. i. p. 176; Temm. Man. d'Orn. 1815, p. 240; Leach, Syst. Cat. Mam. & B. B. M. p. 12; Naum. Vog. Deuts. (1826) v. p. 298, t. 134; Flem. Brit. An. p. 91; Jenyns, Man. B. Vert. An. p. 150; Eyton, Cat. Brit. B. p. 29; Pr. Bonap. Geogr. Comp. List of B. p. 39; Keys. & Bl. Wirbelth. Eur. p. 35; Schleg. Rev. Crit. des Ois. d'Eur. p. 50; G. R. Gray, Gen. of B. и. р. 435.

Dendrocopus major, Koch, Baier. Zool. i. p. 72.

Dryobates major, Boie, Isis (1828), p. 325.

Picus cissa, Pall. Zoogr. i. p. 412.

Picus pinetorum, Brehm, Vog. Deuts. p. 187, t. xiii. f. 3.

Picus pityopicus, Brehm, Vog. Deuts. p. 188. Picus frondium, Brehm, Vog. Deuts. p. 189.

Picus montanus, Brehm, Vog. Deuts. p. 189. Picus pipra, Macgill. Hist. Brit. B. iii. p. 80.

Great Spotted Woodpecker, Bew. Brit. B. (1797) i. p. 118, fig. ; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i, p. 319; Selby, Brit. Orn. i. p. 106; Yarr. Brit. B. 2 edit. ii. p. 148, fig.

Middle Spotted Woodpecker, Bew. Brit. B. (1797) i. p. 119; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 321, pl. xli. upp. fig.

Pl. enl. 196, 595; Gould, B. of Eur. pl. 229.

- a. Wiltshire. Male. From Col. Montagu's collection.
- b. Norfolk. Young. Presented by Lady Hanniford.
- c. Wiltshire. Female. From Col. Montagu's collection.

## 2. PICUS MINOR. The Lesser Spotted Woodpecker.

Picus minor, Linn. S. N. i. p. 176; Temm. Man. d'Orn. 1815, p. 243; Leach, Syst. Cat. Mam. & B. B. M. p. 12; Naum. Vög. Deuts. (1826) v. p. 334, t. 136, f. 3, 4; Flem. Brit. An. p. 92; Brehm, Vög. Deuts. p. 193; Jenyns, Man. B. Vert. An. p. 151; Eyton, Cat. Brit. B. p. 29; Pr. Bonap. Geogr. Comp. List of B. p. 39; Keys. & Bl. Wirbelth. Eur. p. 35; Schleg. Rev. Crit. des Ois. d'Eur. p. 51; G. R. Gray, Gen. of B. ii. p. 435.

Dendrocopus minor, Koch, Baier. Zool. i. p. 73.

Dryobates minor, Boie, Isis (1826), p. 326.

Picus hortorum, Brehm, Vög. Deuts. p. 192.

Picus striatus, Macgill. Hist. Brit. B. iii. p. 86.

Picus pipra, Pall. Zoogr. i. p. 414.

Lesser Spotted Woodpecker, Bew. Brit. B. (1797) i. p. 120; Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 107; Yarr. Brit. B. 2 edit. ii. p. 154, fig.

p. 154, fig. Least Spotted Woodpecker, Penn. Brit. Zool. (1812) i. p. 322, pl. xi. low. fig.

Pl. enl. 598, f. 1, 2; Gould, B. of Eur. pl. 231.

- a. Surrey (Combe Wood). Female.
- b. Surrey. Male.
- c. Wiltshire. Male. From Col. Montagu's collection.
- d. Sternum. England.

## 3. Picus villosus. The Hairy Woodpecker.

Picus villosus, Linn. S. N. i. p. 157; Flem. Brit. An. p. 92; Jenyns, Man. B. Vert. An. p. 151; Eyton, Cat. Brit. B. p. 66; G. R. Gray, Gen. of B. ii. p. 434.

Dryobates villosus, Boie, Isis (1828), p. 326.

Picus (Dendrocopus) villosus, Swains. Fauna Bor. Amer. ii. p. 305.

Hairy Woodpecker, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 324.

Lewin, Brit. Birds, pl. 50.

(Halifax, Yorkshire).

### 3. DRYOCOPUS.

Dryocopus, Boie, Isis (1826), p. 977.
Dendrocopus, Brehm, Isis (1828), p. 1274.
Carbonarius, Kaup, Naturl. Syst. der Eur. Thier. p. 131 (1829).
Dryotomus, Swains. Fauna Bor. Amer. Birds, p. 301 (1831).

## 1. DRYOCOPUS MARTIUS. The Great Black Woodpecker.

Picus martius, Linn. S. N. i. p. 173; Temm. Man. d'Orn. 1815, p. 236; Naum. Vög. Deuts. (1826) v. p. 253, t. 131; Flem. Brit. An. p. 92; Jenyns, Man. B. Vert. An. p. 151; Eyton, Cat. Brit. B. p. 28; Macgill. Hist. Brit. B. iii. p. 77; Schleg. Wirbelth. Eur. p. 49,

Dryocopus martius, Boie, Isis (1826), p. 977; Pr. Bonap. Geogr. Comp. List of B. p. 39; G. R. Gray, Gen. of B. ii. p. 436.
Dendrocopus pinetorum, Brehm, Vög. Deuts. p. 185, t. xiii. f. 3.

Dendrocopus martius, Brehm, Vog. Deuts. p. 185. Carbonarius martius, Kaup, Naturl. Syst. p. 131.

Dryotomus martius, Swains. Fauna Bor. Amer. p. 301. Picus (Dryocopus) martius, Keys. & Bl. Wirbelth. Eur. p. 34. Great Black Woodpecker, Mont. Orn. Dict.; Penn. Brit. B. (1812)

i. p. 325; Yarr. Brit. B. 2 edit. ii. p. 132, fig.

Pl. enl. 596; Gould, B. of Eur. pl. 225.
(Devonshire, Dorsetshire, Battersea Fields, &c.).

## ii. GECININE.

## 1. GECINUS.

Gecinus, Boie, Isis (1831), p. 542. Cornix, Mahring, Syst. Av. p. 79 (1752). Brachylophus, Swains. Classif. of B. ii. p. 308 (1831). Colaptes, Brehm, Isis (1828), p. 1274.

## 1. GECINUS VIRIOIS. The Green Woodpecker.

Picus viridis, Linn. S. N. i. p. 175; Tenm. Man. d'Orn. 1815, p. 238; Leach, Syst. Cat. Mam. & B. B. M. p. 12; Naum. Vöy. Deuts. (1826) v. p. 270, t. 132; Flem. Brit. An. p. 91; Jenyns, Man. B. Vert. An. p. 149; Eyton, Cat. Brit. B. p. 29; Macgill. Hist. Brit. B. iii. p. 91; Pr. Bonap. Geogr. Comp. List of B. p. 40; Schleg. Rev. Crit. des Ois. d'Eur. p. 49.

Picus (Gecinus) viridis, Keys. § Bl. Wirbelth. Eur. p. 34.
Gecinus viridis, Boie, Isis (1831), p. 542; Brehm, Vög. Deuts. p.
198; G. R. Gray, Gen. of B. ii. p. 438.
Gecinus pinetorum, Brehm, Vög. Deuts. p. 197.
Gecinus frondium, Brehm, Vög. Deuts. p. 197.
Gecinus virescens, Brehm, Vög. Deuts. p. 199.
Brachylophus viridis, Swains. Classif. of B. ii. p. 308.
The Green Woodpecker, Bew. Brit. B. (1797) i. p. 116, fig.; Mont.
Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 315; Selby, Brit.
Orn. i. p. 103; Yarr. Brit. B. 2 edit. ii. p. 137, fig.
Pl. enl. 371, 879; Gould, B. of Eur. pl. 226.

a. Kent. Male.

- b. Devonshire. Female. From Col. Montagu's collection.
- c. Great Britain. Male. Presented by J. Gould, Esq.
- d. Cambridgeshire. Male. From Mr. J. Baker's collection.
- e. Cambridgeshire. Female. From Mr. J. Baker's collection.
- f. Skull. England.
- g. Sternum. England.
- h. Sternum. England. Presented by John Ray, Esq.

# iii. Yuncinæ.

### 1. YUNX.

Yunx, Linn. S. N. (1748). Torquilla, Briss. Orn. iv. p. 3 (1760). Cuculus (pars), Linn. S. N. (1735). Jynx, Linn. Faun. Suec. (1746).

## 1. YUNX TORQUILLA. The Wryneck.

Yunx torquilla, Linn. S. N. i. p. 172; Temm. Man. d'Orn. 1815, p. 248; Leach, Syst. Cat. Mam. & B. B. M. p. 12; Naum. Vög. Deuts. (1826) v. p. 356, t. 138; Flem. Brit. An. p. 92; Jenyns, Man. B. Vert. An. p. 152; Eyton, Cat. Brit. B. p. 29; Macgill. Hist. Brit. B. ii. p. 110; Pr. Bonap. Geogr. Comp. List of B. p. 40; Schleg. Rev. Crit. des Ois. d'Eur. p. 51; G. R. Gray, Gen. of B. ii. p. 448.

Jynx torquilla, Linn. Faun. Suec. p. 34; Brehm, Vög. Deuts. p. 202; Keys. & Bl. Wirbelth. Eur. p. 34.

Jynx arborea, Brehm, Vög. Deuts. p. 203.

Jynx punctata, Brehm, Vog. Deuts. p. 203.

The Wryneck, Bew. Brit. B. (1797) i. p. 111, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 312; Selby, Brit. Orn. i. p. 110; Yarr. Brit. B. 2 edit. ii. p. 158, fig. Gould, B. of Eur. pl. 233.

a. Wiltshire. Male. From Col. Montagu's collection.

b. England. Presented by Mr. Scott.

c, d. Cumbridgeshire. Young. Presented by Mr. J. Baker. e, f. Two Sterna. England. Presented by T. Ingali, Esq.

g. Sternum. England. Presented by John Ray, Esq.

## FAM. II. CUCULIDÆ.

## i. Coccyzinæ.

# 1. COCCYZUS.

Coccyzus, Vieill. Analyse, &c., p. 28 (1816). Coccyzon, Gloger (1827). Cureus, Boie, Isis (1831), p. 541. Erythrophrys, Swains. Classif. of B. ii. p. 322 (1837). Coccygius, Nitzsch, Pterylog. p. 128 (1840). Coccysus, Savi.

1. Coccyzus americanus. The Yellow-billed American Cuckow.

Cuculus americanus, Linn. S. N. i. p. 170; Schleg. Rev. Crit. des Ois, d' Eur. p. 51.

Cuculus dominicus, Linn. S. N. i. p. 170.

Cuculus carolinensis, Wils. Amer. Orn. pl. 28, f. 1.

Cuculus cinerosus, Temm. Man. d'Orn. (1840) iii. p. 277.

Coccyzus americanus, Jenyns, Man. B. Vert. An. p. 165; Eyton, Cat. Brit. B. p. 30; Macgill. Hist. Brit. B. iii. p. 137; G. R. Gray, Gen. of B. ii. p. 457.

Cureus americanus, Boie, Isis (1831), p. 541.

Erythrophrys carolinensis, Swains. Classif. of B. ii. p. 322.

Erythrophrys americanus, Pr. Bonap. Geogr. Comp. List of B. p. 40.

Coccystes americanus, Keys. & Bl. Wirbelth. Eur. p. 34. Coccyzus pyropterus, Vicill. N. Diet. d'Hist. Nat. viii. p. 270. The Yellow-billed American Cuckoo, Yarr. Brit. B. 2 edit. ii. p. 204, fig. Virginian Cuckoo, Eyton, R. Brit. B. p. 23, fig.

Gould, B. of Eur. pl. 242; Wils. Amer. Orn. pl. 28, f. 1.

a. Pembrokeshire. Presented by the Earl of Cawdor.

### ii. Cuculinæ.

### 1. CUCULUS.

Cuculus, Linn. S. N. (1735). Chrysococcyx, Boie, Isis (1826), p. 977. Chalcites, Less. Tr. d'Ornith. p. 152 (1831). Lamphomorpha, Vigors, Proc. Z. Soc. (1831) p. 92.

### a. Cuculus.

### 1. Cuculus canorus. The Common Cuckoo.

Cuculus canorus, Linn. S. N. i. p. 168; Temm. Man. d'Orn. 1815, p. 232; Leach, Syst. Cat. Mam. & B. B. M. p. 12; Naum. Vog. Deuts. (1826) v. p. 196, t. 127-129; Flem. Brit. An. p. 90; Brehm, Vög. Deuts. p. 151; Jenyns, Man. B. Vert. An. p. 154; Eyton, Cat. Brit. B. p. 29; Macgill. Hist. Brit. B. iii. p. 109; Pr. Bonap. Geogr. Comp. List of B. p. 40; Keys. & Bl. Wirbelth. Eur. p. 34; Schleg. Rev. Crit. des Ois. d'Eur. p. 51; G. R. Gray, Gen. of B. ii. p. 463.

Cuculus rufus, Bechst. Ornith. Taschenb. i. p. 84.

Cuculus hepaticus, Lath. Ind. Orn. i. p. 215; Sparrm. Mus. Carls. t. 55.

Cuculus borealis, Pall. Zoogr. i. p. 442.

Cuculus cinereus, Brehm, Vog. Deuts. p. 152. The Cuckoo, Bew. Brit. B. (1797) i. p. 104.

Common Cuckow, Mont. Orn. Dict.

Common Cuckoo, Penn. Brit. Zool. (1812) i. p. 305, pl. xl. upper fig.; Selby, Brit. Orn. i. p. 98; Yarr. Brit. B. 2 edit. ii. p. 189, fig.

Pl. enl. 811; Gould, B. of Eur. pl. 240.

- a. Devonshire. Male. From Col. Montagu's collection.
- b. Devonshire. Female. From Col. Montagu's collection.
- c. Great Britain. Female.

d. Surrey. Young.

c. Cornwall. Young (albino). From Mr. Bullock's collection.
f, g. Cambridgeshire. Very young. Presented by Mr. J. Baker.
h. Cambridgeshire. Young, male. From Mr. J. Baker's collection.
i. Cambridgeshire. Young, female. From Mr. J. Baker's collec-

tion.

g. Sternum (male). England. Presented by T. Ingall, Esq.

### 2. OXYLOPHUS.

Oxylophus, Swains. Classif. of B. ii. p. 322 (1837). Edolius, Less. Tr. d Orn. p. 147 (1831). Coccystes (Glog.), Keys. & Bl. Wirbelth. Eur. p. 34 (1840).

### 1. OXYLOPHUS GLANDARIUS. The Great Spotted Cuckow.

Cuculus glandarius, Linn. S. N. i. p. 169; Naum. Vög. Deuts. (1826)
v. p. 237, t. 130; Brehm, Vög. Deuts. p. 154; Schleg. Rev. Crit. des Ois. d'Eur. p. 41.

Coccyzus pisanus, Vieill. Encyc. Meth. p. 1349. Cuculus macrourus, Brehm, Vög. Deuts. p. 153. Cuculus gracilis, Brehm, Vög. Deuts. p. 154.

Cuculus pisanus, Gmel. S. N. i. p. 416; Vieill. Faun. Franc. i. p. 60, t. 29, f. 1, 2.

Coceysus glandarius, Savi, Ornit. Tosc i. p. 154.

Oxylophus glandarius, Pr. Bonap. Geogr. Comp. List of B. 40; G. R. Gray, Gen. of B. ii. p. 464.

Coccystes glandarius, Keys. & Bl. Wirbelth. Eur. p. 34.

The Great Spotted Cuckow, Yarr. Brit. B. 2 edit. ii. p. 200, fig. Edwards, Birds, pl. 57; Pl. col. 414; Gould, B. of Eur. pl. 241.

(Clifden, County of Galway).

## ORDER IV. COLUMBÆ.

Passeres, pt. Linn. (1735). Gallinæ, pt.—Brachypteræ, pt. Mæhr. (1752). Nudipedes, pt.—Plumipedes, pt. Schaff. (1774). Fissipedes tetradactyles, pt. — F. anisodactyles, conico-protensirostres, pt. Schæff. (1774). Retipedes, pt.—Gallinacees, pt. Scop. (1777). Columba Struthiones, pt. Lath. (1790). Gallinæ, pt. Cuv. (1795-1796). Gallinæ, pt.—Alectrides, pt. Cuv. (1799—1800). Columbini—Inepti, Illig. (1811). Columba, Temm. (1815). Columbini, Vieill. (1816). Gallinacees, pt. Cuv. (1817). Columba-Inertes, pt. Temm. (1820). Giranti, Ranz. (1823). Rasores, pt. Vigors (1826). Gemitrices, Macgill. (1840). Gallinaceze, pt. Keys. & Bl. (1840).

## FAM. I. COLUMBIDÆ.

## i. Columbinæ.

### COLUMBA.

Columba, Linn. S. N. (1735). Palumbus, Kaup, Naturl. Syst. der Eur. Thier. p. 107 (1829).

## a. PALUMBUS.

## 1. COLUMBA PALUMBUS. The Ring Dove.

Columba palumbus, Linn. S. N. i. p. 282; Temm. Man. d'Orn. 1815, p. 276; Naum. Vög. Deuts. (1833) vi. p. 168, t. 149; Flem. Brit. An. p. 47; Jenyns, Man. B. Vert. An. p. 161; Eyton, Cat. Brit. B. p. 31; Pr. Bonap. Geogr. Comp. Eur. and Amer. Birds, p. 41; Macgill. Hist. Brit. B. i. p. 259; Keys. & Bl. Wirbelth. Eur. p. 62; G. R. Gray, Gen. of B. ii. p. 470.

Columba torquata, Leach, Syst. Cat. Mam. & B. B. M. p. 26.

Palumbus -, Kaup, Naturl. Syst. p. 107.

Ring Dove, Bew. Brit. B. (1797) i. p. 270, fig.; Penn. Brit. Zool. (1812) i. p. 392; Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 288; Yarr. Brit. B. 2 edit. ii. p. 277, fig.

Pl. enl. 316; Temm. Pig. t. 2; Gould, B. of Eur. pl. 243.

a. Wiltshire. From Col. Montagu's collection.

b. Saffron Walden. From Mr. J. Clark's collection.

c, d. Cambridgeshire. Young. Presented by Mr. J. Baker, e. Cambridgeshire. Male. From Mr. J. Baker's collection.

f. Sternum. England. Presented by John Ray, Esq.

### b. COLUMBA.

### 2. COLUMBA ENAS. The Stock Dove.

Columba &uas, Gmel. S. N. i. p. 769; Temm. Man. d'Orn. 1815, p. 277; Leach, Syst. Cat. Mam. & B. B. M. p. 26; Naum. Vög. Deuts. (1833) vi. p. 215, t. 151; Flem. Brit. An. p. 47; Jenyns, Man. B. Vert. An. p. 161; Eyton, Cat. Brit. B. p. 32; Pr. Bonap. Geogr. Comp. List of B. p. 41; Macgill. Hist. Brit. B. i. p. 287; Keys. & Bl. Wirbelth. Eur. p. 62; Schleg. Rev. Crit. des Ois. d'Eur. p. 73; G. R. Gray, Gen. of B. ii. p. 470.

Wood Pigeon, Eyton, Hist. R. Brit. B. p. 27, fig.

Stock Dove, Penn. Brit. Zool. (1812) i. p. 390; Selby, Brit. Orn. i. p. 291; Yarr. Brit. B. 2 edit. ii. p. 283, fig.

Pl. enl. 466; Temm. Pig. t. 11; Gould, B. of Eur. pl. 244.

a. Great Britain.

b. Great Britain. From Mr. Turner's collection.
 c. Cambridgeshire. Presented by Mr. J. Baker.

d. Sternum. England. Presented by T. Ingall, Esq. e. Sternum. England. Presented by John Ray, Esq.

## 3. COLUMBA LIVIA. The Rock Dove.

Columba livia, Briss. Orn. i. p. 82; Temm. Man. d'Orn. 1815, p. 278; Naum. Vög. Deuts. (1833) vi. p. 186, t. 150; Jenyns, Man. B. Vert. An. p. 162; Eyton, Cat. Brit. B. p. 32; Macgill. Hist. Brit. B. i. p. 268; Keys. & Bl. Wirbelth. Eur. p. 62; G. R. Gray, Gen. of B. ii. p. 470.

Columba domestica, Gmel. S. N. i. p. 769.

Columba ænas, Linn. S. N. i. p. 279.

The Wild Pigeon, Bew. Brit. B. (1797) i. p. 267, fig.
Rock Dove, Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 292; Yarr.
Brit. B. 2 edit. ii. p. 288, fig.

Common Pigeon, *Penn. Brit. Zool.* (1812) i. p. 383, pl. 49, low. fig. .

Pl. enl. 510; Temm. Pig. t. 12; Gould, B. of Eur. pl. 245.

a, b. Carmarthen. From Col. Montagu's collection.

c, d. Cambridgeshire. Presented by Mr. J. Baker. e. Varieties. From Mr. Turner's collection.

### 2. ECTOPISTES.

Ectopistes, Swains. Zool. Journ. iii. p. 362 (1827).

1. Ectopistes migratorius. The Passenger Pigeon.

Columba migratoria, Linn. S. N. i. p. 285; Jenyns, Man. B. Vert. An. p. 163; Schleg. Rev. Crit. des Ois. d'Eur. p. 74.

Columba canadensis, Linn. S. N. i. p. 284.

Ectopistes migratorius, Swains. Zool. Journ. 1827; Eyton, Cat. Brit. B. p. 33; Keys. & Bl. Wirbelth. Eur. p. 62; G. R. Gray, Gen. of B. ii. p. 471.

Passenger Pigeon, Flem. Brit. An. p. 145; Yarr. Brit. B. 2 edit. ii.

p. 304, fig.

Migratory Pigeon, Eyton, Hist. R. Brit. B. p. 30, fig. Temm. Pig. t. 48, 49; Wils. Amer. Orn. pl. 44, f. 1. (Fifeshire).

#### 3. TURTUR.

Turtur, Selby, Brit. B. (1835). Peristera, Boie, Isis (1828), p. 327.

### 1. TURTUR AURITUS. The Turtle Dove.

Columba turtur, Linn. S. N. i. p. 284; Temm. Man. d'Orn. 1815, p. 279; Leach, Syst. Cat. Mam. & B. B. M. p. 26; Boie, Isis (1822), p. 558; Flem. Brit. An. p. 47; Naum. Vög. Deuts. (1833) vi. p. 233, pl. 152; Jenyns, Man. B. Vert. An. p. 162; Macgill. Hist. Brit. B. i. p. 291; Keys. & Bl. Wirbelth. Eur. p. 62; Schleg. Rev. Crit. des Ois. d'Eur. p. 74.

Turtur auritus (Ray), G. R. Gray, Gen. of B. ii. p. 472.

Peristera turtur, Boie, Isis (1828), p. 327.

Turtur migratorius, Selby, Brit. B.

Turtur vulgaris, Eyton, Cat. Brit. B. p. 32.

Turtle Dove, Bew. Brit. B. (1797) i. p. 272, fig.; Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 294; Yarr. Brit. B. 2 edit. ii. p. 299, fig.

Turtle, Penn. Brit. Zool. (1812) i. p. 394, pl. 49, upp. fig.

Pl. enl. 394; Temm. Pig. t. 42; Gould, B. of Eur. pl. 246.

a. Devonshire. From Col. Montagu's collection.

b. Cambridgeshire. Young. Presented by Mr. J. Baker.
 c. Cambridgeshire. Male. From Mr. J. Baker's collection.

d. Cambridgeshire. Female. From Mr. J. Baker's collection.

e. Sternum. England. Presented by John Ray, Esq. f. Skull. England. Presented by John Ray, Esq.

## ORDER V. GALLINÆ.

Gallinæ, Linn. (1735); Mæhr. (1752); Lath. (1790); Cuv. (1795—1796), (1799—1800); Temm. (1815); Ranz. (1823).

Plumipedes, pt. Schaff. (1774).

Fissipedes anisodactyles, conico-incurvirostres, Scheff. (1774).

Retipedes, pt.—Gallinacees, Scop. (1777).

Grallæ, pt. Lath. (1790).

Alectrides, Cuv. (1799-1800).

Rasores — Gallinacei — Epollicati — Crypturi — Grallatores, pt.—Vaginati—*Illiq.* (1811).

Gallinacei—G. nudipedes—G. plumipedes—Alectrides—Coleoramphi, Vieill. (1816).

Gallinacees, Cuv. (1817).

Gallinæ-Palmipedes, pt. Temm. (1820).

Razzolanti Ranz. (1823). Rasores, Vigors (1826).

Radrices, Macaill. (1840).

Gallinaceæ, Keys. & Bl. (1840).

### FAM. I. PHASIANIDÆ.

## i. PAVONINÆ.

### 1. PAVO.

Pavo, Linn. S. N. (1735).

## 1. PAVO CRISTATUS. The Crested Peacock.

Pavo cristatus, Linn. S. N. i. p. 267; Flem. Brit. An. p. 45; Jenyns, Man. B. Vert. An. p. 164; Keys. & Bl. Wirbelth. Eur. p. 65.

Pavo cristatus, domesticus, *Temm. Pig. & Gall.* ii. p. 35, iii. p. 661. The Peacock, *Bew. Brit. B.* (1797) i. p. 289, fig.; *Penn. Brit. Zool.* (1812) i. p. 369.

Pl. enl. 433, 434.

a. Great Britain. Male.

b. Great Britain. Male. Presented by Dr. Dowler.

c. England. Male. Presented by Master James Edward Harris.
 d. England. Female. Presented by Master James Edward Harris.

### ii. PHASIANINÆ.

### 1. PHASIANUS.

Phasianus, Linn. S. N. (1748). Tetrao (pars), Linn. S. N. (1735). Syrmaticus, Wagl. Isis (1832), p. 1229).

## a. PHASIANUS.

## 1. Phasianus colchicus. The Common Pheasant.

Phasianus colchicus, Linn. S. N. i. p. 271; Temm. Man. d'Orn. 1815, p. 282; Leach, Syst. Cat. Mam. & B. B. M. p. 26; Flem. Brit. An. p. 46; Naum. Vög. Deuts. (1833) vi. p. 433, t. 162; Jenyns, Man. B. Vert. An. p. 166; Pr. Bonap. Geogr. Comp. List of B. p. 42; Maegill. Hist. Brit. B. i. p. 144; Keys. & Bl. Wirbelth. Eur. p. 64; Schleg. Rev. Crit. des Ois. d'Eur. p. 74; G. R. Gray, Gen. of B. iii. p. 496.

The Pheasant, Bew. Brit. B. (1797) i. p. 282, fig.; Penn. Brit.

Zool. (1812), i. p. 372.

Common Pheasant, Mont. Orn. Dict. & Suppl.; Selby, Brit. Orn. i. p. 298; Yarr. Brit. B. 2 edit. ii. p. 310, fig.

Var. Bohemian Pheasant, Jenyns, Man. B. Vert. An. p. 167; Yarr. Brit. B. 2 edit. ii. p. 321.

Var. Phasianus torquatus, Gmel. S. N. i. p. 742; β.? Flem. Brit. An. p. 46; Jenyns, Man. B. Vert, An. p. 167.

Ring or Ring-necked Pheasant, Mont. Orn. Dict.

Common Pheasaut, variety of, Yarr. Brit. B. 2 edit. ii. p. 321.

Pl. enl. 121, 122; Gould, B. of Eur. pl. 247.

a. Norfolk. Male.

b, c. England. Male.

d, e. England. Male. Presented by Thomas Hodges, Esq.

f. Kent. Presented by the Rev. T. Coble.

g, h. England.

i. England. Presented by Thomas Hodges, Esq.

j. Hampshire. Male. Presented by G. B. Tyndale, Esq.
 k. Hampshire. Female. Presented by G. B. Tyndale, Esq.

t. England. Mottled.

m. England. Albino.

- n, o. Cambridgeshire. Chicks. From Mr. J. Clark's collection.
- p. Great Britain. Bohemian variety. From Mr. Warwick's collection.
- Great Britain. Hybrid with Spanish Fowl. From Mr. Bartlett's colletion.
- r. Sternum.
- s. Sternum. England. Presented by John Ray, Esq.

#### 2. GALLUS.

Gallus, Linn. S. N. (1744). Gallina, Linn. (1735).

### 1. GALLUS BANKIVA, VAI.

Gallus domesticus, Temm. Pig. & Gal. ii. p. 92, iii. p. 654; Flem. Brit. An. p. 46; Jenyns, Man. B. Vert. An. p. 165.

Phasianus gallus, Linn. S. N. i. p. 270.
Gallus Bankiva, G. R. Gray, Gen. of B. iii. p. 499.
Gallus gallinaceus, Pall. Zoogr. ii. p. 88.

The Domestic Cock, Bew. Brit. B. (1797) i. p. 276, fig. Pl. enl. 1.

- Var. B. cristatus. Crested Cock.
  - y. pusillus. Bantam Cock.
  - 8. pumilio. Dwarf Cock.
- e. pentadactylus. Dorking Cock.
- a. Cambridgeshire. Male. Presented by Mr. J. Baker.
- b. Cambridgeshire. Male Bantam. Presented by Mr. J. Baker.
- c, d. Female Bantams. Presented by Mr. J. Baker.
- e, f. Cambridgeshire. Chicks, Bantam. Presented by Mr. J. Baker.
- g. Cambridgeshire. Chicks. Presented by Mr. J. Baker.
- h. Great Britain. Male. Presented by Mr. J. Baker.
- i. Male. Presented by Mr. J. Baker.
- j. Sussex. Male. Presented by Mrs. C. Tooke.
- k, l. Great Britain. Presented by Mr. J. Baker.

## iii. MELEAGRINÆ.

### 1. MELEAGRIS.

Meleagris, Linn. S. N. (1735). Gallopavo, Briss. Orn. i. p. 158 (1760). Cenchramus, Mæhring, Av. Gen. p. 51 (1752).

## 1. MELEAGRIS GALLOPAVO. The Turkey.

Meleagris gallopavo, Linn. S. N. i. p. 268; Flem. Brit. An. p. 45; Jenyns, Man. B. Vert. An. p. 164; Keys. & Bl. Wirbelth. Eur. p. 65; G. R. Gray, Gen. of B. iii. p. 500.

Meleagris fera, Vieill. N. Dict. & Hist. Nat. ix. p. 447.

The Turkey, Bew. Brit. B. (1797) i. p. 286, fig.

Turky, Penn. Brit. Zool. (1812) i. p. 374.

Pl. enl. 97.

a, b. Kent. Variety (white). Presented by J. P. Atkins, Esq.
c. Cambridgeshire. Young. Presented by Mr. J. Baker.
d, e. Cambridgeshire. Chicks. Presented by Mr. J. Baker.
f. Skull. Presented by John Ray, Esq.

## 2. NUMIDA.

Numida, Linn. S. N. (1766). Meleagris, Mahr. Av. Gen. p. 52 (1752). Guttera, Wagl. Isis (1832), p. 1225. Acryllium, G. R. Gray, List of Gen. of B. (1840) p. 61.

## a. NUMIDA.

## 1. NUMIDA MELEAGRIS. The Pintado.

Numida meleagris, Linn. S. N. i. p. 273; Flem. Brit. An. p. 46; Jenyns, Man. B. Vert. An. p. 168; Keys. & Bl. Wirbelth. Eur. p. 65; G. R. Gray, Gen. of B. iii, p. 501.

The Pintado, Bew. Brit. B. (1797), i. p. 293, fig.

Pl. enl. 108.

a. Cambridgeshire. White variety. From Mr. J. Clark's collection.
b. Cambridgeshire. Chicks. Presented by Mr. J. Baker.

### Fam. II. TETRAONIDÆ.

### i. Perdicinæ.

### 1. CACCABIS.

Caccabis, Kaup, Naturl. Syst. der Eur. Thier. p. 183 (1829). Chacura, Hodgs. Madr. Journ. (1837) p. 305. Pyctes, Hodgs. Gray's Zool. Misc. p. 85 (1844). Alectoris, Kaup, Naturl. Syst. der Eur. Thier. p. 180 (1829).

### a. CACCABIS.

## 1. CACCABIS RUFA. The Red-legged Partridge.

Tetrao rufus, Linn. S. N. i. p. 276. Perdix rufa, Lath. Ind. Orn. ii. 647, B.; Flem. Brit. An. p. 45. Perdix rubra, Briss. Orn. i. p. 236; Temm. Man. d'Orn. 1815, p. 306: Naum. Vog. Deuts. (1833) vi. p. 563, t. 165; Jenyns, Man. B. Vert. An. p. 172; Pr. Bonap. Geogr. Comp. List of B. p. 43; Macgill. Hist. Brit. B. i. p. 215; Keys. & Bl. Wirbelth. Eur. p. 65; Schleg. Rev. Crit. des Ois. d'Eur. p. 77. Caccabis rufa, G. R. Gray, Gen. of B. iii. p. 508. Guernsey Partridge, Mont. Orn. Dict. Red-legged Partridge, Yarr. Brit. B. 2 edit. ii. p. 381, fig. Pl. enl. 150; Gould, B. of Eur. pl. 260.

a. Royston, Herts. Male. From Mr. J. Baker's collection.
b. (Great Britain), Leadenhall Market. Male. From Mr. J. Baker's collection.

c. Leadenhall Market. Female. From Mr. J. Baker's collection.

## b. Alectoris.

## 2. CACCABIS PETROSA. The Barbary Partridge.

Tetrao petrosus, Gmel. S. N. i. p. 758. Perdix petrosa, Lath. Ind. Orn. p. 770; Temm. Man. d'Orn. 1815. p. 308; Keys. & Bl. Wirbelth. Eur. p. 65. Caccabis petrosa, G. R. Gray, Gen. of B. iii. p. 508. Alectoris petrosa, Kaup, Naturl. Syst. p. 180. The Barbary Partridge, Yarr. Brit. B. 2 edit, ii. p. 387, fig. Edw. Birds, pl. 70. (Leicestershire and Oxfordshire).

### 2. PERDIX.

Perdix, Briss. Ornith. i. p. 219 (1760). Starna, Pr. Bonap. Geogr. Comp. List of B. p. 43 (1838). Tetrao (pars), Linn. S. N. (1735).

## 1. PERDIX CINEREA. The Common Partridge.

Tetrao perdix, Linn. S. N. i. p. 276.

Perdix cinerea, Lath. Ind. Orn. ii. p. 645; Temm. Man. d'Orn. 1815, p. 309; Flem. Brit. An. p. 44; Naum. Vöy. Deuts. (1833) vi. p. 477, t. 163; Jenyns, Man. B. Vert. An. p. 172; Macgill. Hist. Brit. B. i. p. 218; Brehm, Vög. Deuts. p. 524; G. R. Gray, Gen. of B. iii. p. 506.

Perdix vulgaris, Leach, Syst. Cat. Mam. & B. B. M. p. 27.

Starna cinerea, Pr. Bonap. Geogr. Comp. List of B. p. 43; Keys. & Bl. Wirbelth, Eur. p. 65.

Perdix cineracea, Brehm, Vog. Deuts. p. 525.

The Partridge, Bew. Brit. B. (1797) i. p. 305, fig.

Common Partridge, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 363; Selby, Brit. Orn. i. p. 314; Yarr. Brit. B. 2 edit. ii. p. 370, fig.

Pl. enl. 27; Gould, B. of Eur. pl. 262.

a. Somersetshire. Male.

b. Devonshire. Male.

c. Cambridgeshire. Male. Presented by Mr. J. Baker.

d. Cambridgeshire. Female and chicks. Presented by Mr. J. Baker.

e. Kent. Pale variety. Presented by J. Planta, Esq. f-h. Cambridgeshire. Young. Presented by Mr. J. Buker.

i, k. England. Young.

n. Sternum. England.

## 3. COTURNIX.

Coturnix, Mahr. Av. Gen. p. 54 (1752). Tetrao (pars), Linn. S. N. (1735). Ortygion, Keys. & Bl. Wirbelth. Eur. p. 66 (1840).

#### The Common Quail. 1. COTURNIX COMMUNIS.

Tetrao coturnix, Linn. S. N. i. p. 278.

Perdix coturnix, Lath. Ind. Orn. ii. p. 651; Leach, Syst. Cat. Mam. & B. B. M. p. 27; Naum. Vog. Deuts. (1833) vi. p. 575, t. 166; Jenyns, Man. B. Vert. Anim. p. 174.

Coturnix communis, Bonn. Encyc. Meth. p. 217; G. R. Gray, Gen.

of B. iii. p. 507.

Coturnix dactylisonans, Meyer, Voq. Liv. u. Esthlands. p. 167; Temm. Man. d'Orn. (1815), p. 311; Steph. Gen. Zool. xi. p. 361; Macgill. Brit. B. i. p. 233; Pr. Bonap. Geogr. Comp. List of **B**. p. 43.

Coturnix vulgaris, Flem. Brit. Anim. p. 45; Eyton, Cat. Brit. B. p.

31; Schleg. Rev. Crit. des Ois. d'Eur. p. 78. Ortygion coturnix, Keys. & Bl. Wirbelth. Eur. p. 66.

Coturnix major (Briss.) Brehm, Vög. Deuts. p. 527, t. 26, f. 4. Coturnix media, Brehm, Vög. Deuts. p. 528.

Coturnix minor, Brehm, Vog. Deuts. p. 529.

The Quail, Bew. Brit. B. (1797) ii. p. 308, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) i. p. 366.

Common Quail, Bew. Brit. B. ii. p. 400, fig. Common Quail, Selby, Brit. Orn. i. p. 318.

Pl. enl. 170; Gould, B. of Eur. pl. 263.

a. Somersetshire. From Col. Montagu's collection.

b. Cambridgeshire. Young. Presented by Mr. J. Baker.

c. Cambridgeshire. Chicks. Presented by Mr. J. Baker. d. Sternum. England. Presented by John Ray, Esq.

## ii. *Turnicinæ*.

### 1. TURNIX.

Turnix, Bonn. Encycl. Meth. p. 5 (1790). Hemipodius, Reinw. Temm. Pig. & Gall. iii. p. 753 (1815). Tridactylus, Lacep, Mem. de l'Instit. (1800-1801). Ortygis, Ill. Prodr. Mam. p. 242. (1811). Ortygodes, Vieill. Analyse, &c. p. 52 (1816).

## 1. Turnix africanus. The Andalusian Quail.

Turnix africanus, Desfont. Mem. de l'Acad. des Sci. (1789) p. 500; G. R. Gray, Gen. of B. iii. p. 510.

Tetrao andalusicus, Gmel. S. N. i. p. 766. Turnix andalusica, Bonn. Ency. Meth. 7; Savi, Onit. Tosc. i. p.

Perdix andalusicus, Lath. Ind. Orn. p. 656. Hemipodius andalusicus, Boie, Isis, 1822, p. 558.

Hemipodius tachydromus, Temm. Man. d'Orn. (1815) p. 314.

Ortygis andalusica, Keys. & Bl. Wirbelth. Eur. p. 66. Andalusian Quail, Newm. Zool. 1845, p. 872 & 989, fig.

The Andalusian Hemipode, Yarr. Brit. B. 2 edit. ii. p. 408, fig.

Gould, B. of Eur. pl. 264.

(Oxfordshire).

## iii. ODONTOPHORINÆ.

### 1. ORTYX.

Ortyx, Steph. Gen. Zool. xi. p. 376 (1819). Colinus, Less. (183 ?). Ortygia, Boie, Isis, 1826, p. 978. Colinia, Nutt. (18 ?). Eupsychortyx, Gould, Monogr. Odont. (1845). Philortyx, Gould, Monogr. Odont. (1845).

## a. ORTYX.

## 1. ORTYX VIRGINIANA. The Virginian Colin.

Tetrao virginianus, Linn. S. N. i. p. 277. Tetrao marilandus, Linn. S. N. i. p. 277.

Perdix virginiana, Lath. Ind. Orn. p. 650; Jenyns, Man. B. Vert.

Anim. p. 173. Perdix borealis, Temm. Pig. et Gall, iii. p. 436, 735.

Ortyx borealis, Steph. Gen. Zool. xi. p. 377.

Ortyx virginiana, Macgill. Brit. B. i. p. 228; Keys. & Bl. Wirbelth.

Europ. p. 66; G. R. Gray, Gen. of B. iii. p. 513. Ortygia marilandica, Boie, Isis, 1828, p. 326.

American Partridge, Mont. Orn. Dict. Suppl. (Grosbeak). The Virginian Colin, Yarr. Brit. B. 2 edit. ii, p. 391, fig.

(Near Mausfield, &c.).

### iv. Tetraoninæ.

### 1. TETRAO.

Tetrao, Linn. pt. S. N. (1735). Urogallus, Scop. Introd. ad Hist. Nat. &c. (1777). Grygallus, Gem. Lyrurus, Swains, Fauna Bor. Amer. ii. p. 497 (1831). Centrocercus Swains. Fauna Bor. Amer. ii. p. 496 (1831).

### a. Urogallus.

## 1. TETRAO UROGALLUS. The Wood Grous.

Tetrao urogallus, Linn. S. N. i. p. 273; Temm. Man. d'Orn. (1815) i. p. 285; Brehm, Vög. Deuts. p. 501; Naum. Vög. Deuts. (1833) vi. p. 277, t. 154, 155; Jenyns, Man. B. Vert. Anim. p. 168; Macgill. Brit. B. i. p. 138; Keys. & Bl. Wirbelth. Europ. p. 64; Schleg. Rev. Crit. des Ois. d'Eur. p. 75; G. R. Gray, Gen. of B. iii. p. 516. Tetrao major, Brehm, Vog. Deuts. p. 503. Tetrao crassirostris, Brehm, Vög. Deuts. p. 504. Tetrao maculatus, Brehm, Vög. Deuts. p. 504. Urogallus —, Kaup, Naturl. Syst. p. 180. Wood Grous, Mont. Orn. Dict. & Suppl.; Penn. Brit. Zool. 1812, i. p. 348, pl. 44, 45. The Capercaillie, Yarr. Brit. B. 2 edit, ii, p. 323, fig. Pl. enl. 73, 74; Gould, B. of Eur. pl. 248.

a. Scotland. Female From Col. Montagu's collection.

## ? 2. Tetrao hybridus. The Spurious Grous.

Tetrao medius, Meyer, Mag. der Gesellsch. Naturf. Fr. v. 3; Quart. 1811; Temm. Man. d'Orn. 1815, p. 287; Naum. Vög. Deuts. (1833) vi. p. 304, t. 156; Jenyns, Man. B. Vert. Anim. p. 169; Brehm, Vög. Deuts. p. 506; Yarr. Brit. B. 2 edit. ii. p. Tetrao intermedius, Langsd. Mem. de l'Acad. de Petersb. iii. (1811) p. 286; Keys, & Bl. Wirbelth. Eur. p. 64.

Tetrao hybridus, Linn. Faun. Suec. p. 72; Sparrm. Mus. Carls. t. 15; Penn. Brit. Zool. (1812) i. p. 355; Flem. Brit. An. p. 44; G. R. Gray, Gen. of B. iii. p. 516.
Hybridus Grous, Mont. Ornith. Dict.
(Scotland).

### b. LYRURUS.

### 3. TETRAO TETRIX. The Black Grouse.

Tetrao tetrix, Linn, S. N. i. p. 274; Temm. Man. d'Orn. 1815, p. 289; Leach, Syst. Cat. Mam. & B. B. M. p. 27; Flem. Brit. Anim. p. 43; Brehm, Vög. Deuts. p. 510; Naum. Vög. Deuts. (1833) vi. p. 324, t. 157; Jenyns, Man. B. Vert. Anim. p. 169; Eyton, Cat. Brit. B. p. 30; Macgill. Brit. B. p. 145; Keys. & Bl. Wirbelth. Eur. p. 64; G. R. Gray, Gen. of B. iii. p. 516. Urogallus tetrix, Kanp, Naturl. Syst. p. 180. Tetrao juniperorum, Brehm, Vög. Deuts. p. 509. Tetrao rupestris, Brehm, Vög. Deuts. p. 513. Lyrurus tetrix, Swains. Fauna Bor. Amer. p. 497. The Black Grous, Bew. Brit. B. (1797) i. p. 298, fig. Black Grous, Mant. Ornith. Dict.; Penn. Brit. Zool. (1812) i. p. 352, pl. 46; Selby, Brit. Ornith. i. p. 304. Pl. enl. 172, 175; Gould, B. of Eur. pl.

a. Devonshire. Male. From Col. Montagu's collection.

b. Hybrid between the Black Grous and Pheasant. Presented by His Grace the Duke of Northumberland, K.G., &c.

c. Sternum. England. Presented by John Ray, Esq.

## 2. LAGOPUS.

Lagopus, Briss. Orn. i. p. 181 (1760). Oreias, Kaup, Naturl. Syst. der Eur. Thier. p. 177 (1829). Attagen, Kaup, Naturl. Syst. der Eur. Thier. p. 170 (1829).

## a. OREIAS.

## 1. LAGOPUS SCOTICUS. The Red Grouse.

Tetrao lagopus, Gmel. Syst. N. ii. p. 750, var. 7.
Tetrao scoticus, Lath. Ind. Orn. ii. p. 641; Jenyns, Man. B. Vert.
Anim. p. 170.

Lagopus scoticus, Leach, Syst. Cat. Mam. & B. B. M. p. 27; Vieill. N. Dict. d'Hist. Nat. xvii. p. 206; Steph. Gen. Zool. xi. p. 293; Flem. Brit. Zool. p. 43; Eyton, Cat. Brit. B. p. 30; Pr. Bonap. Geogr. Comp. List of B. p. 44; Macgill. Brit. B. i. p. 169; Keys. & Bl. Wirbelth. Eur. p. 63; G. R. Gray, Gen. of B. iii. p. 517.

Tetrao saliceti, var., Temm. Man. d'Orn. 1815, p. 296.

Tetrao saliceti, scoticus, Schleg. Rev. Crit. des Ois. d'Eur. p. 76.

Oreias scoticus, Kaup, Naturl. Syst. p. 177.

Red-Grous, Bew. Brit. B. (1797) i. p. 301, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1813) i. p. 356; Selby, Brit. Orn. i. p. 307. The Red Grouse, Yarr. Brit. B. 2 edit. ii. p. 351, fig.

Gould, B. of Eur. pl. 252.

a. Scotland. Male. From Col. Montagu's collection.

b. Scotland. Female. From Col. Montagu's collection.

- c. Leadenhall Market. Male. From Mr. J. Baker's collection.
- d. Leadenhall Market. Female. From Mr. J. Baker's collection.
- e. Orkney Islands. Male. From Mr. J. Baker's collection.
- f. Orkney Islands. Female. From Mr. J. Baker's collection.
  g. Orkney Islands. Chicks. From Mr. J. Baker's collection.

h. Sternum. England. Presented by John Ray, Esq.

## b. LAGOPUS.

## 2. LAGOPUS ALBUS. The Ptarmigan.

Tetrao lagopus, Linn. S. N. i. p. 274; Temm. Man. d'Orn. 1815, p. 293; Naum. Vög. Deuts. (1833) vi. p. 401, t. 160, 161; Jenyns, Man. B. Vert. Anim. p. 170; Schleg. Rev. Crit. des Ois. d'Eur. p. 76.

Lagopus mutus, Leach, Syst. Cat. of Mam. & B. B. M. p. 27; Steph. Gen. Zool. xi. p. 287, pl. 21.

Tetrao alpinus, Nils. Orn. Suec. i. p. 311.

Lagopus alpinus, Nils. Skand. Faun. ii. p. 98; Keys. & Bl. Wirbelth. Eur. p. 63.

Lagopus vulgaris, Vieill. N. Dict. d'Hist. Nat. xvii. p. 199; Flem. Brit. Anim. p. 43; Eyton, Cat. Brit. B. p. 30.

Tetrao rupestris (Gmel.), Jenyns, Man. B. Vert. Anim. p. 171; Eyton, Cat. Brit. B. p. 31?

Tetrao montanus, Brehm.

Lagopus montanus, Brehm, Vög. Deuts. p. 516.

Lagopus albus, Boie, Isis, 1822, p. 557; G. R. Gray, Gen. of B. iii. p. 517.

Lagopus cinereus, Macgill. Hist. Brit. B. i. p. 187.

White Grouse, Bew. Brit. B. 1797, i. p. 303, fig. Rock Grouse, Eyton, Hist. R. Brit. B. i. p. 25, fig.? Ptarmigan, Mont. Orn. Dict.; Penn. Brit. Zool. 1812, i. p. 359, pl. 57; Selby, Brit. Orn. i. p. 310; Yarr. Brit. B. 2 edit. ii. p. 359, fig.

Pl. enl. 129, 494; Gould, B. of Eur. pl. 253.

Spring. Presented by J. Gould, Esq. a Scotland.

b. Scotland. In change. From Col. Montagu's collection.

c. Scotland. Winter. From Col. Montagu's collection. d, e. Inverness. From Mr. J. Baker's collection.

f. Leadenhall Market. From Mr. J. Baker's collection.
 g. Sternum. England. Presented by T. Ingall, Esq.
 h. Sternum. England. Presented by John Ray, Esq.

## ORDER VI. STRUTHIONES.

Galling, pt. Linn. (1735); Lath. (1790). Brachypteræ, Mæhr. (1752). Grallæ, pt. Linn. (1760). Nudipedes, pt. Schaff. (1774). Fissipedes bidactyles—F. tridactyles, Schaff. (1774). Retipedes, pt.—Longipedes, pt. Scop. (1777). Struthiones, Lath. (1790). Gallinæ, pt.—Brevipennes, Cuv. (1799-1800). Cursores, pt.—Proceri—Campestris, Illig. (1811). Cursores, pt. Temm. (1815). Grallatores, pt.-G. di-tridactyli.-Megistanes-Pedionomi, Visill. (1816). Grallæ, pt.—Brevipennes—Pressirostres, pt. Cuv. (1817). Cursores-Inertes, pt. Temm. (1820). Ratitæ, pt.—Brachypteri—Tachidromi, pt. Ranz. (1823). Rasores, pt. Vigors. (1826). Cursitrices, pt. Macgill. (1840). Grallatores, pt. Keys. & Bl. (1840).

## FAM. I. STRUTHIONIDÆ.

## i. Otidinæ.

### 1. OTIS.

Otis, Linn. S. N. i. (1735). Tetrax, Leach, Syst. Cat. Mam. & B. B. M. (1816).

## 1. Otis TARDA. The Great Bustard.

Otis tarda, Linn. S. N. i. p. 264; Temm. Man. d'Orn. 1815; p. 317; Leach, Syst. Cat. Mam. & M. p. 27; Flem. Brit. An. p. 115; Brehm, Vög. Deuts. p. 532; Naum. Vög. Deuts. (1834), vii. p. 12, t. 167, 168; Jenyns, Man. B. Vert. An. p. 174; Eyton, Cat. Brit. B. p. 33; Macgill. Man. N. H. Ornith. ii. p. 39; Keys. & Bl. Wirbelth. Eur. p. 67; Schleg. Rev. Crit. des Ois. d'Eur. p. 79; G. R. Gray, Gen. of B. iii. p. 532. Otis major, Brehm, Vög. Deuts. p. 531, t. 27, f. 1.

Great Bustard, Bew. Brit. B. 1797, i. p. 314, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. 1812, i. p. 376, pl. 48; Selby, Brit. Orn. i. p. 326; Yarr. Brit. B. 2 edit. ii. p. 415, fig.

Pl. enl. 245; Gould, B. of Eur. pl. 267.

a. Wiltshire. Male. From Col. Montagu's collection.

### 2. OTIS TETRAX. The Little Bustard.

Otis tetrax, Linn. S. N. i. p. 264. Temm. Man. d'Orn. 1815, p. 318; Flem. Brit. An. p. 115; Brehm, Vög. Deuts. p. 533; Naum. Vög. Deuts. (1834) vii. p. 52, t. 169; Jenyns, Man. B. Vert. An. p. 175; Eyton, Cat. Brit. B. p. 33; Keys. & Bl. Wirbelth. Eur. p. 67; Schleg. Rev. Crit. des Ois. d'Eur. p. 79; G. R. Gray, Gen. of B. iii. p. 532.

Tetrax campestris, Leach, Syst. Cat. Mam. & B. B. M. p. 28;

Steph. Gen. Zool. xi. p. 455, pl. 32.

Otis tetrao, Macgill. Man. N. H. Ornith. ii. p. 40.

Little Bustard, Bew. Brit. B. (1797) i. p. 318, fig.; Mont. Orn. Dict.; Selby, Brit. Orn. i. p. 330; Yarr. Brit. B. 2 edit. ii. p. 426, fig.

Lesser Bustard, Penn. Brit. Zool. 1812 i. p. 379.

Pl. enl. 25, 10; Gould, B. of Eur. pl. 269.

a. Plymouth, Devon. Presented by W. Prideaux, Esq.

b. Norfolk. From Mr. Bullock's museum.

## 2. EUPODOTIS.

Eupodotis, Less. Rev. Zool. (1839) i. p. 47. Houbara, Pr. Bonap. (1832). Chlamydotis, Less. Rev. Zool. (1839) p. 47.

## ?? EUPODOTIS UNDULATA. The Ruffed Bustard.

Eupodotis undulata, G. R. Gray, Gen. of B. iii. p. 533. Houbara undulata, G. R. Gray, List of Gen. of B. 1841, p. 83. Otis houbara, Gmel. S. N. i. p. 725; Roberts, in Zoologist, 1848, p. 2065; Newm. Pref. to Zoologist (1848) p. vi.; Keys. & Bl. Wirbelth. Eur. p. 67. Psophia undulata, Jacq. Vög. t. 2. Otis Macqueenii, (Gray) Gould, in Zoologist, 1848, p. 2146. Chlamydotis houbara, Less. Rev. Zool. 1839, p. 47. Little Bustard, Roberts, in Zoologist, 1848, p. 1969.

Gould, B. of Eur. pl. 268.
(Lincolnshire).

## ORDER VII. GRALLÆ.

Macrorhynchæ—Anseres, pt.—Scolapaces, Linn. (1735). Hydrophilæ, pt.—Scolopaces—Odontorhynchæ, pt.—Urinatrices, pt.

Machr. (1752).

Grallæ, Linn. (1760) Cuv. (1795—1796).
Nudipedes, pt. — Fissipedes tetradactyles — Pinnatipedes ou Lobipedes—Palmipedes tetradactyles, pt. Schæff. (1774).

Retipedes, pt.-Palmipedes, pt.-Longipedes, Scop. (1777).

Grail - Gallinæ, pt. - Palmipedes, pt. - Pinnatipedes, Lath. (1790).

Gralla-Brevirostres - Cultrirostres - Latirostres-Longirostres -

Pressirostres, Cuv. (1799)—1800).

Grallatores — Cursores, pt. — Littorales — Alectorides — Herodii — Falcati—Limicolæ—Macrodactyli—Lobipedes — Hygrobatæ, pt.

Illig. (1811).

Grallatores—Cursores, pt.—Pinnatipedes, pt. Temm. (1815—1820).
Grallatores—Ægialites—G. Tetradactyli—Elonomi—Falcirostres—
Latirostres—Herodiones—Ærophoni—Uncirostres—Hilebatæ—
Macronyches—Macrodactyli—Pinnatipedes—Palmipedes, pt.
Vieill. (1816).

Gralla-Cultrirostres-Longirostres-Pressirostres-Macrodactyles,

Cuv. (1817).

Grallæ—Uneirostri — Tachidromi — Limicoli — Falcirostri — Erodii — Macrodatyli — Pinnatipedi — Latirostri — Igrobata, Ranz. (1823).

Grallatores, Vigors. (1826); Keys. & Bl. (1840).

Cursitrices — Tentatrices — Latitrices — Aucupatrices, Macgill. (1840).

## FAM. I. CHARADRIDÆ.

i. EDICNEMINÆ.

## 1. ŒDICNEMUS.

Œdicnemus, Temm. Man. d'Orn. 1815, p. 321 (1815). Fedoa, Leach, Syst. Cat. Mam. & B. B. M. p. 28 (1816).

### 1. EDICNEMUS CREPITANS. The Great Plover.

Charadrius Œdicnemus, Linn. S. N. i. p. 255.

Otis Œdicnemus, Lath. Ind. Orn. ii. p. 661.

Œdicnemus crepitans, Temm. Man. d'Orn. 1815, p. 322; Brehm, Vög. Deuts. p. 538, t. 27, f. 2; Naum. Vög. Deuts. (1834) vii. p. 92, t. 172; Jenyns, Man. B. Vert. An. p. 177; Eyton, Cat. Brit. B. p. 333; Pr. Bonap. Geogr. Comp. List of B. p. 45; Macgill. Man. N. H. Ornith. ii. p. 46; Keys. & Bl. Wirbelth. Eur. p. 69; Schleg. Rev. Crit. des Ois. d'Eur. p. 81; G. R. Gruy, Gen. of B. iii. p. 535.

Fedoa Œdicnemus, Leach, Syst. Cat. Mam. & B. B. M. p. 28.

Œdicnemus Belloni, Flem. Brit. An. p. 114.

Œdicnemus desertorum, Brehm, Vög. Deuts. p. 539.

Œdicnemus arenarius, Brehm, Vög. Deuts. p. 539.

Œdicnemus griseus, Koch, Baier. Zool. i. p. 266.

The Great Plover, Bew. Brit. B. (1797) i. p. 321, fig; Yarr. Brit. B. 2 edit. ii. p. 436, fig.

Thick-kneed Bustard, Mont. Orn. Dict.; Penn. Brit. Zool. 1812, i. p. 380.

Common Thick-knee, Selby, Brit. Orn. i. p. 250.

Pl. enl. 919; Gould, B. of Eur. pl. 288.

a. Wiltshire. From Col. Montagu's collection.

b. Cambridgeshire, young.

c. Norfolk. Young. Presented by J. Scales, Esq.

d. Cambridgeshire. Chicks. Presented by Mr. J. Baker.

e. Sternum. England. Presented by John Ray, Esq.

d. Skull. England. Presented by John Ray, Esq.

## ii. Cursorinæ.

### 1. CURSORIUS.

Cursorius, Lath. Ind. Orn. ii. p. 751 (1790). Tachydromus, Ill. Prodr. Mam. & Av. p. 250 (1811). Cursor, Wagl. Syst. Av. (1827).

## 1. Cursorius gallicus. The Cream-coloured Courser.

Cursorius gallicus, Gmel. S. N. i. p. 692; G. R. Gray, Gen. of B. iii. p. 537.

Cursorius europæus, Lath. Ind. Orn. ii. p. 751; Keys. & Bl. Wirbelth. Eur. p. 67; Schleg. Rev. Crit. des. Ois. d'Eur. p. 80. Cursorius isabeilinus, Meyer, Taschenb. Deuts. ii. p. 328; Temm. Man. d'Orn. 1815, p. 342; Flem. Brit. An. p. 112; Brehm, Vöy. Deuts. p. 536; Jenyns, Man. B. Vert. An. p. 176; Eyton, Cat. Brit. B. p. 35; Pr. Bonap. Geogr. Comp. List. of B. p. 45; Macgill. Man. N. H. Ornith. ii. p. 42.

Tachydromus gallieus, Ill. Prod. p. 250.

Cursor isabellinus, Wagl. Syst. Av. p. Cursor europœus, Naum. Vog. Deuts. (1834) vii. p. 77, t. 171.

Cream-coloured Plover, Mont. Orn. Dict.

Cream-coloured Swiftfoot, Selby, Brit. Orn. ii. p. 217 Cream-coloured Courser, Yarr. Brit. B. 2 edit. ii. p. 431.

Pl. enl. 795; Gould, B. of Eur. pl. 266.

a. St. Albans. From Mr. Donovan's collection.

## iii. GLAREOLINÆ.

### 1. GLAREOLA.

Glareola, Briss. Ornith. v. p. 141 (1760). Trachelia, Scop. Introd. ad Hist. Nat. &c. (1777).

## I. GLAREOLA PRATINCOLA. The Collared Pratincole.

Hirundo pratincola, Linn. S. N. i. p. 345.

Glareola austriaca, Gmel. S. N. i. p. 695; Brehm, Vög. Deuts. p. 565.

Glareola nævia, Gmel. S. N. i. p. 695.

Glareola senegalensis, Gmel. S. N. i. p. 696; Brehm, Vög. Deuts. p. 566.

Glareola torquata, Meyer, Taschenb. Deuts. ii. p. 404; Temm. Man. d'Orn. 1815, p. 352; Flem. Brit. An. p. 94; Brehm, Vög. Deuts. p. 566; Naum. Vög. Deuts. (1838) ix. p. 437, t. 234; Macgill.

Man, N. H. Ornith, ii. p. 43.

Glareola pratincola, Leach, Linn. Trans. xiii. p. 131, pl. 12; Savi, Ornit. Tosc. i. p. 214; Jenyns, Man. B. Vert. An. p. 216; Eyton, Cat. Brit. B. p. 47; Pr. Bonap. Geogr. Comp. List of B. p. 45; Keys. & Bl. Wirbelth. Eur. p. 66; Schleg. Rev. Crit. des Ois. d'Eur. p. 80; G. R. Gray, Gen. of B. iii. p. 538.

Austrian Pratincole, Mont. Orn. Dict. Suppl. pl. Collared Pratincole, Selby, Brit. Orn. i. p. 322; Yarr. Brit. B.

2 edit. ii. p. 441, fig.

Pl. enl. 882; Gould, B. of Eur. pl. 265.

(Lancashire, Isle of Unst, &c.)

### iv. CHARADRINÆ.

### 1. VANELLUS.

Vanellus, Linn. S. N. (1735). Parra, Lacep. Mem. de l'Instit. (1800-1801).

#### The Crested Lapwing. 1. VANELLUS CRISTATUS.

Tringa vanellus, Linn. S. N. i. p. 248. Vanellus vulgaris, Bechst. Ornith. Taschenb. ii. p. 313. Charadrius vanellus, Wagl. Syst. Av. p. ; Naum. Vög. Deuts. (1838) ix. p. 269, t. 179. Vanellus gavia, Leach, Syst. Cat. Mam. & B. B. M. p. 29; Steph. Gen. Zool. xi. p. 509, pl. 38. Vanellus bicornis, Brehm, Vog. Deuts. p. 557. Vanellus cristatus, Meyer, Vög. Deuts. i. p. 10; Temm. Man. d'Orn. 1815, p. 347; Flem. Brit. An. p. 111; Brehm, Vög. Deuts. p. 555; Jenyns, Man. B. Vert. An. p. 182; Eyton, Cat. Brit. B. p. 35; Pr. Bonap. Geogr. Comp. List of B. p. 46; Macgill. Man. N. H. Ornith. ii. p. 55; Keys. & Bl. Wirbelth. Eur. p. 69; Schleg. Rev. Crit. des Ois. d'Eur. p. 83; G. R. Gray, Gen. of B. ii. p. 541. The Pee-wit, Bew. Brit. B. (1797) i. p. 324, fig. Lapwing, Mont. Orn. Dict. Lapwing Sandpiper, Penn. Brit. Zool. ii. p. 66. Crested or Green Lapwing, Selby, Brit. Orn. ii. p. 221. The Peewit or Lapwing, Yarr. Brit. B. 2 edit. ii. p. 481, fig. Pl. enl. 242; Gould, B. of Eur. pl. 291.

a. Wiltshire. From Col. Montagu's collection.

b. Cambridgeshire. Young. Presented by Mr. J. Baker.

c. Cambridgeshire. Chicks. Presented by Mr. J. Baker.

d. Kirkwall. Young. From Mr. J. Baker's collection. England. Presented by John Ray, Esq. e. Sternum.

f. Skull. England. Presented by John Ray, Esq.

## 2. SQUATAROLA.

Squatarola, Cuv. Reg. Anim. (1817) i. p. 467. Vanellus, Mahr. Av. Gen. p. 76 (1752).

## 1. SQUATAROLA HELVETICA. The Grev Plover.

Tringa squatarola, Linn. S. N. i. p. 252.

Tringa varia, Linn. S. N. i. p. 252. Tringa helvetica, Linn. S. N. i. p. 250.

Charadrius hypomelas, Pall. Reisc. iii. p. 699.

Charadrius pardela, Pall. Zoogr. ii. p. 142.

Vanellus melanogaster, Bechst. Naturg. Deuts. iv. p. 356; Temm. Man. d'Orn. 1815, p. 345.

Charadrius squatarola, Naum. Vog. Deuts. (1838) ix. p. 249, t. 178. Squatarola helvetica, Brehm, Vog. Deuts. p. 554; Pr. Bonap. Geogr. Comp. List of B. p. 46; Keys. & Bl. Wirbelth. Eur. p. 70; G. R. Gray, Gen. of B. iii. p. 543.

Squatarola grisea, Leach, Syst. Cat. Mam. & B. B. M. p. 29;

Steph. Gen. Zool. xi. p. 505.

Squatarola cinerea (Cuv.), Flem. Brit. An. p. 111; Eyton, Cat. Brit. B. p. 34.

Squatarola varia, Boie, Isis (1822), p. 558; Brehm, Vog. Deuts. p. 553.

Vanellus griseus, Jenyns, Man. B. Vert. An. p. 181.

Pluvialis squatarola, Macgill. Man. N. H. Ornith. ii. p. 48.

Gray Plover, Bew. Brit. B. (1797) i. p. 331; Yarr. Brit. B. 2 edit. ii. p. 477, fig.

Grey Sandpiper, Mont. Orn. Dict.; Penn. Brit. Zvol. (1812) ii. p. 69.

Bastard or Grey Plover, Selby, Brit. Orn. ii. p. 227.

Pl. enl. 923, 854, 853; Gould, B. of Eur. pl. 290.

- a. Bristol. Male. From Col. Montagu's collection.
- b. Bristol. Female. From Col. Montagu's collection.

c. Great Britain.

d. Bristol.

c. Epping. Presented by H. Doubleday, Esq.

f. Sternum. England. Presented by T. Ingall, Esq.

## 3. CHARADRIUS.

Charadrius, Linn. S. N. (1735). Pluvialis, Briss. Ornith. v. p. 42 (1760).

Eudromias, Boie (182?).

Histicula (Mahr.), G. R. Gray, List of Gen. of B. (1840) p. 65. Ægialites, Boie, Isis (1822), p. 558.

## a. CHARADRIUS.

## 1. CHARADRIUS PLUVIALIS. The Golden Plover.

Charadrius pluvialis, Linn. S. N. i. p. 254; Temm. Man. d'Orn. 1815, p. 324; Leach, Syst. Cat. Mam. & B. B. M. p. 29; Flem. Brit. An. p. 113; Brehm, Vög. Deuts. p. 543; Jenyns, Man. B. Vert. An. p. 177; Eyton, Cat. Brit. B. p. 34; Pr. Bonap. Geogr. Comp. List of B. p. 45; Keys. & Bl. Wirbelth. Eur. p. 70; Schleg. Rev. Crit. des Ois. d'Eur. p. 81; G. R. Gray, Gen. of B. iii. p. 544.

Charadrius auratus, Suchow. Nat. der Thier. ii. p. 1592; Brehm, Vög. Deuts. p. 542; Naum. Vög. Deuts. (1834) vii. p. 138, t. 173. Charadrius apricarius, Linn. S. N. i. p. 254; Brehm, Vög. Deuts.

p. 541, t. 27, f. 3.

Charadrius altifrons, Brehm, Vog. Deuts. p. 542.

Pluvialis aurea, Macgill. Man. N. H. Ornith. ii. p. 49.

The Golden Plover, Bew. Brit. B. (1797) i. p. 329, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 98, pl. 17, low. fig.; Yarr. Brit. B. 2 edit. ii. p. 447, fig.

Pl. enl. 904; Gould, B. of Eur. pl. 294.

a. Dartmoor. Presented by P. Ilbert, Esq.
 b. Great Britain. Presented by R. Scales, Esq.

c. Epping. Male, young. Presented by H. Doubleday, Esq. d. Epping. Female. Presented by H. Doubleday, Esq.

e. Cambridgeshire. Presented by Mr. J. Baker.

f. Ham Hill. Very young. From Mr. J. Baker's collection.

## b. EUDROMIAS.

## 2. CHARADRIUS MORINELLUS. The Dotterel.

Charadrius morinellus, Linn. S. N. i. p. 254; Temm. Man. d'Orn. 1815, p. 326; Leach, Syst. Cat. Mam. & B. B. M. p. 28; Flem. Brit. An. p. 113; Naum. Vög. Deuts. (1834) vii. p. 163, t. 174; G. R. Gray, Gen. of B. iii. p. 544.

Charadrius sibiricus, Gmel. S. N. i. p. 690.

Eudromias morinella (Boie), Brehm, Vög. Deuts. p. 545; Pr. Bonap. Geogr. Comp. List of B. p. 45.

Eudromias montana, Brehm, Vög. Deuts. p. 546. Eudromias stolida, Brehm, Vög. Deuts. p. 547.

Pluvialis morinellus, Macgill. Man. N. H. Ornith. ii. p. 50.

The Dotterel, Bew. Brit. B. (1797) i. p. 332, fig.; Selby, Brit. Orn. ii. p. 236; Yarr. Brit. B. 2 edit. ii. p. 455, fig.

Dottrel, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 102, pl. 18, low. fig.

Pl. enl. 832; Gould, B. of Eur. pl. 295.

a. Liverpool. Male. From Col. Montagu's collection.
 b. Cambridgeshire. Male. Presented by Mr. J. Baker.

c. Lancaster. From Col. Montagu's collection.

d. Sussex.

e. Great Britain?

f. Cambridgeshire. Male. From Mr. J. Baker's collection.
g. Cambridgeshire. Female. From Mr. J. Baker's collection.

h. Sternum. England. Presented by John Ray, Esq.

## c. HIATICULA.

# 3. CHARADRIUS HIATICULA. The Ringed Plover.

Charadrius hiaticula, Linn, S. N. i. p. 253; Temm. Man. d'Orn. 1815, p. 328; Flem. Brit. An. p. 113; Naum. Vög. Deuts. (1833) vii. p. 291, t. 175; Jenyns, Man. B. Vert. An. p. 179; Eyton, Cat. Brit. B. p. 34; Macgill. Man. N. H. Ornith. ii. p. 52; Schleg. Rev. Crit. des Ois. d'Eur. p. 83; G. R. Gray, Gen. of B. iii. p. 544.

Charadrius torquatus, Leach, Syst. Cat. Mam. & B. B. M. p. 28.

Ægialitis septentrionalis, Brehm, Vög. Deuts. p. 548.

Egialitis hiaticula, Boie, Isis (1822), p. 558; Brehm, Vög. Deuts. p. 549; Pr. Bonap. Geogr. Comp. List of B. p. 45; Keys. & Bl. Wirbelth. Eur. p. 71.

Hiaticula annulata, G. R. Gray, List of Gen. of B. (1840) p. 65. Hiaticula torquata, G. R. Gray, List of Spec. in Brit. Mus. p. 68.

The Ring Dotterel, Bew. Brit. B. (1797) i. p. 334, fig.

Ringod Plover, Mont. Orn. Dict.; Penn. Brit. Zool. (1813) ii. p. 105; Selby, Brit. Orn. ii. p. 240; Yarr. Brit. B. 2 edit. ii. p. 465, fig.

Pl. enl. 920; Gould, B. of Eur. pl. 296.

a. Carmarthen. Male. From Col. Montagu's collection.

b. Carmarthen. Female. From Col. Montagu's collection. c. Carmarthen From Col. Montagu's collection.

d. Great Britain. From Col. Montagu's collection.

e. Great Britain.

- f. Hayling Island. Presented by J. W. Tyndale, Esq.
- g. Sternum. England. Presented by T. Ingall, Esq. h. Sternum. England. Presented by John Ray, Esq.

### 4. CHARADRIUS CUBONICUS. The Little Ringed Plover.

Charadrius minor, Meyer, Taschenb. Deuts. ii. 324; Temm. Man. d'Orn. 1815, p. 330; Naum. Vög. Deuts. (1834) vii. p. 225, t. 177; Jenyns, Man. B. Vert. An. p. 179; Macgill. Man. N. H. Ornith. ii. p. 53; Schleg. Rev. Crit. des Ois. d'Eur. p. 83. Charadrius fluviatilis, Bechst. Naturg. Deuts. iv. p. 422. Ægialitis fluviatilis, Brehm, Vog. Deuts. p. 549. Charadrius curonicus, Beseke, Vög. Curt. p. 66; G. R. Gray, Gen. of B. iii. p. 544. Ægialites curonicus, Keys. & Bl. Wirbelth. Eur. p. 71. Charadrius hiaticula, Pall. Zoogr. ii. p. 144. Charadrius intermedius, Menetr. Catal. p. 53. Charadrius zonatus, Swains. B. of W. Afr. ii. p. Ægialitis minor, Boie, Isis (1822), p. 558; Brehm, Vog. Deuts. p. 550; Pr. Bonap. Geogr. Comp. List of B. p. 45. The Little Ringed Plover, Yarr. Brit. B. 2 edit. ii. p. 473, fig. · Pl. enl, 921; Gould, B. of Eur. pl. 297. (Shoreham).

## 5. CHARADRIUS CANTIANUS. The Kentish Plover.

Charadrius cantianus, Lath. Ind. Orn. Suppl. p. lxvi.; Temm. Man. d'Orn. 1815, p. 331; Naum. Vög. Deuts. (1834) vii. p. 210, t. 176; Jenyns, Man. B. Vert. An. p. 180; Eyton, Cat. Brit. B. p. 34; Macgill. Man. N. H. Ornith. ii. p. 53; Schleg. Rev. Crit. des Ois. d'Eur. p. 82; G. R. Gray, Gen. of B. iii. p. 544. Charadrius albifrons, Meyer, Taschenb. Deuts. ii. p. 323. Charadrius Alexandrinus, Hassel. Reise. p. 213; Flem. Brit. An. p. 114

Egialitis cantianus, Boie, Isis (1822), p. 558; Brehm, Vög. Deuts. p. 551; Pr. Bonap. Geogr. Comp. List of B. p. 45; Keys. & Bl. Wirbelth. Eur. p. 71.

Ægialitis albifrons, Brehm, Vög. Deuts. p. 551. Ægialitis albigularis, Brehm, Vög. Deuts. p. 552. Kentish Plover, Lewin, Brit. B. v. pl. 185; Mont. Orn. Dict. (Ringed Plover); Selby, Brit. Orn. ii. p. 243; Yarr. Brit. B. 2 edit. ii. p. 469, fig.

Gould, B. of Eur. pl. 298.

a-c. Great Britain.

e. Hastings. Male. From Mr. J. Baker's collection. f. Hastings. Female. From Mr. J. Baker's collection.

# v. HEMATOPODINE.

### 1. HÆMATOPUS.

Hæmatopus, Linn. S. N. (1735). Ostralega, Briss. Ornith. v. p. 38 (1760).

## 1. HEMATOPUS OSTRALEGUS. The Oyster-catcher.

Hæmatopus ostralegus, Linn. S. N. i. p. 257; Temm. Man. d'Orn. 1815, p. 340; Leach, Syst. Cat. Mam. & B. B. M. p. 28; Flem. Brit. An. p. 115; Brehm, Vög. Deuts. p. 561, 1. 29, f. 1; Naum. Vög. Deuts. (1834) vii. p. 325, t. 181; Jenyns, Man. B. Vert. An. p. 184; Eyton, Cat. Brit. B. p. 35; Pr. Bonap. Geogr. Comp. List of B. p. 46; Keys. & Bl. Wirbelth. Eur. p. 71; Schleg. Rev. Crit. des Ois. d'Eur. p. 85; G. R. Gray, Gen. of B. iii. p. 547.

Hæmatopus hypoleucus, Pall. Zoogr. ii. p. 129.

Hæmatopus balthicus, Brehm, Vög. Deuts. p. 563. Hæmatopus orientalis, Brehm, Vög. Deuts. p. 563.

Ostralegus hæmatopus, Macgill. Man. N. H. Ornith. ii. p. 59.

Ostralegus vulgaris, Less. Rev. Zool. 1849, p. 47.

Oyster-catcher, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 7, fig.: Yarr. Brit. B. 2 edit. ii. p. 496, fig.

Pied Oyster-catcher, Penn. Brit. Zool. (1812) ii. p. 112, pl, 19.

Pl. enl. 929; Gould, B. of Eur. pl. 300.

a, b. Great Britain.

c. Great Britain. Young.

d. Shetland Islands. From Mr. J. Baker's collection. e. Sternum. England. Presented by T. Ingall, Esq.

f. Skull. England.

g. Trachea. England.

h. Skull. England. Presented by John Ray, Esq.

### vi. CINCLINÆ.

#### 1. CINCLUS.

Cinclus, Mahr. Avium Gen. p. 77 (1752).
Strepsilas, Ill. Prodr. Mam. & Av. p. 263 (1811).
Arenaria, Briss. Ornith. v, p. 132 (1760).
Morinella, Meyer, Vöy. Liv. und Ecthl. p. 210 (1810).

### 1. CINCLUS INTERPRES. The Turnstone.

Strepsilas interpres, Ill. Prod. Mam. & Av. p. 263; Leach, Syst. Cat. Mam. & B. B. M. p. 29; Steph. Gen. Zool. xi. p. 520; Flem. Brit. An. p. 110; Naum. Vog. Deuts. (1834) vii. p. 303, t. 160; Jenyns, Man. B. Vert. An. p. 182; Eyton, Cat. Brit. B. p. 43; Pr. Bonap. Geogr. Comp. List of B. p. 46; Keys. & Bl. Wirbelth. Eur. p. 71; Macgill. Man. N. H. Ornith. ii. p. 57; Schleg. Rev. Crit. des Ois. d'Eur. p. 85. Tringa interpres, Linn. S. N. i. p. 248. Tringa morinella, Linn. S. N. i. p. 249. Morinella collaris, Meyer, Vög. Liv. und Ecthl. p. 210. Charadrius cinclus, Pall. Zoogr. ii. p. 148. Strepsilas collaris, Temm. Man. d'Orn. 1815, p. 349; Brehm, Vog. Deuts. p. 558. Cinclus interpres, G. R. Gray, Gen. of B. iii. p. 549. Cinclus morinellus, G. R. Gray, List of Gen. of B. (1841) p. 87. Strepsilas borealis, Brehm, Vög. Deuts. p. 559. Strepsilas littoralis, Brehm, Vog. Deuts. p. 560. Turnstone, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 126, fig.; Yarr. Brit. B. 2 edit. ii. p. 486, fig. Turnstone Sandpiper, Penn. Brit. Zool. (1812) ii. p. 83. Pl. enl. 856, 340, 857; Gould, B. of Eur. pl. 318.

a. Great Britain. Adult.

b. London Market. From Mr. J. Baker's collection.

c. Sternum. England. Presented by John Ray, Esq.

## FAM. II. ARDEIDÆ.

### i. PSOPHINÆ.

### 1. PSOPHIA.

Psophia, Linn. S. N. (1756).

## ?1. PSOPHIA CREPITANS. The Gold-breasted Trumpeter.

Psophia crepitans, Linn. S. N. i. p. 286; Jenyns, Man. B. Vert. An. p. 185; Eyton, Cat. Brit. B. p. 67. Grus psophia, Pall. Spic. iv. t. 1.

The Golden-breasted Trumpeter, Mont. Orn. Dict. Suppl. (White-winged Grosbeak).

Pl. enl. 169.

(Surrey).

### ii. GRUINÆ.

### 1. GRUS.

Grus, Linn. S. N. (1735). Megalornis, G. R. Gray, List of Gen. of B. (1841) p. 85.

### 1. GRUS CINEREA. The Common Crane.

Ardea grus, Linn. S. N. i. p. 234.

Grus cinerea, Bechst. Naturg. Deuts. iv. p. 103; Temm. Man. d'Orn. 1815, p. 356; Flem. Brit. An. p. 97; Brehm, Vög. Deuts. p. 570, t. 30, f. 2; Naum. Vög. Deuts. (1838) ix. p. 345, t. 231; Jenyns, Man. B. Vert. An. p. 185; Eyton, Cat. Brit. B. p. 35; Pr. Bonap. Geogr. Comp. List of B. p. 46; Keys. & Bl. Wirbelth. Eur. p. 69; Schleg. Rev. Crit. des Ois. d'Eur. p. 100; Macgill. Man. N. H. Ornith. ii. p. 36; G. R. Gray, Gen. of B. i. p. 552.

Grus cineracea, Brehm, Vög. Deuts. p. 571.

Grus communis, Bechst. Ornith. Taschenb. ii. p. 271.

Grus vulgaris, Pall. Zoogr. ii. p. 106. Crane, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 29, fig. Crane Heron, Penn. Brit. Zool. (1812) ii. p. 7, pl. 2. Common Crane, Selby, Brit. Orn. ii. p. 4; Yarr. Brit. B. 2 edit. ii. p. 501, fig.

Pl. enl. 769; Gould, B. of Eur. pl. 270.

(Cork, Devonshire, Oxfordshire and Shetland, &c.)

## iii. Ardeinæ,

### 1. ARDEA.

Ardea, Linn. S. N. (1736).

Herodias, Boie, Isis (1822), p. 559.

Egretta, Pr. Bonap. Sagg. Distr. Met. Anim. Vert. (1831).

Garzetta, Kaup, Naturl. Syst. der Eur. Thier. p. 76 (1829).

Erodius, Macyill. Man. N. H. Ornith. ii. p. 130 (1842).

Ardeola, Boie, Isis (1822), p. 559.

Buphus, Boie, Isis (1822), p. 559.

Cancrophagus, Kaup, Naturl. Syst. der Eur. Thier. p. 42 (1829).

Ardeola, Pr. Bonap. (1828).

#### a. ARDEA.

#### 1. ARDEA CINEREA. The Common Heron.

Ardea cinerea, Linn. S. N. i. p. 236; Temm. Man. d'Orn. 1815, p. 362; Leach, Syst. Cat. Mam. & B. B. M. p. 33; Flem. Brit. An. p. 95; Brehm, Vög. Deuts. p. 580; Naum. Vög. Deuts. (1838) ix. p. 24, t. 220; Jenyns, Man. B. Vert. An. p. 186; Eyton, Cat. Brit. B. p. 36; Pr. Bonap. Geogr. Comp. List of B. p. 47; Keys. & Bl. Wirbelth. Eur. p. 79; Schleg. Rev. Crit. des Ois. d'Eur. p. 96; Macgill. Man. N. H. Ornith. ii. p. 128; G. R. Gray, Gen. of B. iii. p. 555.

Ardea major, Linn. S. N. i. p. 236; Brehm, Vög. Deuts. p. 578.

Ardea cineracea, Brehm, Vög. Deuts. p. 580.

Ardea cheracea, Breim, Voy. Betta. p. 380. Ardea rhenana, Sander. Naturf. xiii. p. 195. Heron, Bew. Brit. B. (1804) ii. p. 37, fig.

Common Heron, Moni. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 10, pl. 3; Selby, Brit. Orn. ii. p. 11; Yarr. Brit. B. 2 edit. ii. p. 508, fig.

Pl. enl. 755; Gould, B. of Eur. pl. 273,

a. Devonshire. Male. From Col. Montagu's collection.

b, c. England. Females.

d. Cambridgeshire. Male. From Mr. J. Baker's collection.

e. Sternum. England.

f. Skeleton. Scotland. Presented by Mr. E. Gerrard. g. Sternum. England. Presented by John Ray, Esq.

## 2. ARDEA PURPUBEA. The Purple Heron.

Ardea purpurea, Linn. S. N. i. p. 236; Temm. Man. d'Orn. 1815, p. 364; Flem. Brit. An. p. 96; Brehm, Vög. Deuts. p. 582, t. 30, f. 3; Naum. Vög. Deuts. (1838) ix. p. 63, t. 221; Jenyns, Man. B. Vert. An. p. 186; Eyton, Cat. Brit. B. p. 36; Pr. Bonap. Geogr. Comp. List of B. p. 47; Keys. & Bl. Wirbelth. Eur. 79; Macgill. Man. N. H. Ornith. ii. p. 129; Schleg. Rev. Crit. des Ois, d'Eur. p. 97; G. R. Gray, Gen. of B. iii. p. 555.

Ardea caspia, Gmel. Reise, ii. p. 193, t. 14; Leach, Syst. Cat. Mam.

& B. B. M. p. 33; Brehm, Vog. Deuts. p. 581.

Ardea botaurus, Gmel. S. N. i. p. 636.

Ardea rufa, Gmel. S. N. i. p. 642. Ardea purpurata, Gmel. S. N. i. p. 641.

Ardea rubiginosa, Gmel. S. N. i. p. 641. Ardea rubiginosa, Gmel. S. N. i. p. 632.

Ardea purpurascens, Brehm, Vög. Deuts. p. 583.

Ardea variegata, Scop. Ann. i. No. 120.

Ardea monticola, La Peyr.

African Heron, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 28.

Crested Purple Heron, Selby, Brit. Orn. ii. p. 15. Purple Heron, Yarr. Brit. B. 2 edit. ii. p. 514, fig.

Pl. enl. 788; Gould, B. of Eur. pl. 274.

a, b. England.

c. Trachea. England. From Col. Montagu's collection.

### b. HERODIAS.

## 3. ARDEA ALBA. The Great White Heron.

Ardea alba, Linn. S. N. i. p. 239; Jenyns, Man. B. Vert. An. p. 187; Keys. & Bl. Wirbelth. Eur. p. 79; Schleg. Rev. Crit. des Ois. d Eur. p. 97; Eyton, Cat. Brit. B. p. 67; G. R. Gray, Gen. of B. iii. p. 555.

Ardea egretta, (Linn.) Temm. Man. d'Orn. 1815, p. 367; Flem. Brit. An. p. 95; Naum. Vög. Deuts. (1838) ix. p. 85, t. 222.

Ardea egrettoïdes, Gmel. Reise, ii. p. 193, t. 24.

Erodius Victoria, Macgill. Man. N. H. Ornith. ii. p. 131. Erodius albus, Macgill. Man. N. H. Ornith. ii. p. 134.

Herodias candida, Brehm, Vög. Deuts. p. 584.

Herodias egretta, Boie, Isis (1822), p. 559; Brehm, Vög. Deuts. p. 584, t. 30, f. 4.

Egretta alba, Swains. Classif. of B. ii. p. 354; Pr. Bonap. Geogr.

Comp. List of B. p. 47.
Great White Heron, Mont. Orn. Dict.; Selby, Brit. Orn. ii. p. 18;
Yarr. Brit. B. 2 edit. ii. p. 518, fig.

White Heron, Penn. Brit. Zool. (1812) ii. p. 19, pl. 5.

Pl. enl. 886; Gould, B. of Eur. pl. 276.

(Devonshire, Norfolk, Yorkshire, &c.)

## 4. ARDEA GARZETTA. The Little Egret.

Ardea Garzetta, Linn. S. N. i. p. 937; Temm. Man. d'Orn. 1815, p. 368; Flem. Brit. An. p. 96; Naum. Vög. Deuts. (1838) ix. p. 101, t. 223; Jenyns, Man. B. Vert. An. p. 187; Eyton, Cat. Brit. B. p. 36; Keys. & Bl. Wirbelth. Eur. p. 79; Schleg. Rev. Crit. des Ois. d'Eur. p. 97; G. R. Gray, Gen. of B. iii. p. 555.

Ardea nivea, S. G. Gmel. Nov. Comm. Petrop. xv. p. 458, t. 17. Herodias garzetta, Boie, Isis (1822), p. 560; Brehm, Vög. Deuts.

p. 586. Garzetta — , Kaup, Naturl. Syst. p. 76.

Egretta garzetta, Pr. Bonap, Geogr. Comp. List of B. p. 47; Swains. Classif. of B. ii. p. 354.

Herodias jubata, Brehm, Vog. Deuts. p. 586.

Herodias nivea, Brehm, Vög. Deuts. p. 587. Erodius garzetta, Macgill. Man. N. H. Ornith. ii. p. 135. Egret, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 45, fig. Egret Heron, Penn. Brit. Zool. (1812) ii. p. 21, pl. 6.

Little Egret Heron, Selby, Brit. Orn. ii. p. 21,

The Little Egret, Yarr. Brit. B. 2 edit. ii. p. 522, fig.

Pt. enl. 901; Gould, B. of Eur. pl. 277.

(Anglesey, Ireland, Cornwall, &c.)

### c. BUPHUS.

### 5. ARDEA COROMANDA. The Buff-backed Heron.

Ardea russata, Wagl. Syst. Av.; Temm. Man. d'Orn. (1820) ii. p. 566, and pt. iv. p. 377 ; Jenyns, Man. B. Vert. An. p. 188; Eyton, Cat. Brit. B. p. 37; Keys. & Bl. Wirbelth, Eur. p. 80.

Ardea coromanda, Bodd. Tab. des Pl. Enl. p. 54.

Egretta russata, G. R. Gray, Gen. of B. iii. p. 556; Swains. Classif. of B. ii. p. 354.

Ardea æquinoctialis, Mont. Linn. Trans. ix. p. 197; Leach, Syst. Cat. Mam. & B. B. M. p. 33; Flem. Brit. An. p. 97.

Erodius russatus, Mucgill. Man. N. H. Ornith. ii. p. 135.

Buphus russatus, Boie, Isis, 1826, p. 356; Pr. Bonap. Geogr. Comp. List of B. p. 47.

Ardea bubuleus, Sav. Descr. de l'Egypte, Zool. i. 298, t. 8, f. 1.

Ardea Veranyi, Roux.

Ardea affinis, Horsf. Linn. Trans. xiii. p. 189.

Ardea coromandelica, Licht. Cat. Doubl. Berl. Mus. p. 78.

Ardea coromandelensis, Steph. Gen. Zool, x. p.

Ardea bicolor, Vieill. N. Dict. d'Hist. Nat. xiv. p. 409.

Ardea ruficapilla, Vieill. N. Dict. d'Hist. Nat. xiv. p. 409.

Ardea leucocephala, Cuv. Mus. Paris.

Ardea caboga, Frankl. Proc. Zool. (1831) p. 124.

Ardea lucida, Rafing.

The Little White Heron, Mont. Orn. Dict. Suppl. & Pl.

The Buff-backed Heron, Selby, Brit. Orn. ii. p. 24; Yarr. Brit. B. 2 edit. ii. p. 526, fig.

Pl. enl. 910; Gould, B. of Eur. pl. 278.

a. Devoushire. Female. From Col. Montagu's collection.

## 6. ARDEA COMATA. The Squacco Heron.

Ardea ralloides, Scop. Ann. i. No. 121; Leach, Syst. Cat. Mam. 4 B. B. M. p. 96; Temm. Man. d'Orn. 1815, p. 369; Jenyns, Man. B. Vert. An. p. 189; Eyton, Cat. Brit. B. p. 36.

Ardea comata, Pall. Reise, ii. p. 715; Naum. Vog. Deuts. (1838) ix. p. 120, t. 224; Keys. & Bl. Wirbelth. Eur. p. 80; Schleg. Rev. Crit. des Ois. d'Eur. p. 97; G. R. Gray, Gen. of B. iii. p. 556. Ardea squaiotta, Gmel. S. N. i. p. 634.

Ardea castanea, Gmel. S. N. i. p. 633.

Ardea erythropus, Gmel. S. N. i. p. 634.

Ardea audax, La Peyr. Newe. Schwed, abh. iii. p. 306.

Ardea Marsigli, Lepechin. Nov. Com. Petr. xiv. p. 502, t. xiv. f. 1.

Ardea pumila, Lepechin, Nov. Com. Petr. xiv. p. 502. Egretta comata, Swains. Classif. of B. ii. p. 354. Botaurus comatus, Macgill, Man. N. H. Ornith, ii. p. 125. Ardeola ralloides, Boie, Isis (1822), p. 559. Cancrophagus ralloides, (Boie) Kaup, Naturl. Syst. p. 42. Buphus comatus, Boie, Isis, 1826, p. 356; Brehm, Vog. Deuts. p. 588. Buphus castaneus, Brehm, Vög. Deuts. p. 589.

Buphus ralloïdes, Brehm, Vog. Deuts. p. 589; Pr. Bonap. Geogr. Comp. List of B. p. 48.

Buphus Illyricus, Brehm, Vog. Deuts. p. 590, t. 31, f. 1.

Squacco Heron, Penn. Brit. Zool. (1812) ii. p. 26; Selby, Brit. Orn. ii. p. 25; Yarr. Brit. B. 2 edit. ii. p. 530, fig. Squacco Heron, Mont. Orn. Dict. Suppl.

Pl. enl. 348; Gould, B. of Eur. pl. 275.

a. Conway, Denbighshire.

## d. Ardetta.

### 7. ABDEA MINUTA. The Little Bittern.

Ardea minuta, Linn. S. N. i. p. 240; Leach, Syst. Cat. Mam. & B. B. M. p. 33; Temm. Man. d'Orn. 1815, p. 371; Flem. Brit. An. p. 97; Naum. Vög. Deuts. (1838) ix. p. 194, t. 227; Jenyns, Man. B. Vert. An. p. 189; Keys. & Bl. Wirbelth. Eur. p. 80; Schleg. Rev. Crit. des Ois. d'Eur. p. 99; G. R. Gray, Gen. of B. iii. p. 556.

Ardea danubialis, Gmel. S. N. i. p. 637.

Ardea soloniensis, Gmel. S. N. i. p. 637. Botaurus minutus, Boie, Isis (1822), p. 559; Brehm, Vög. Deuts. p. 597, t. 34, f. 3; Eyton, Cat. Brit. B. p. 37; Macgill. Man. N.

H. Ornith. ii. p. 124. Botaurus pusillus, Brehm, Vög. Deuts. p. 598.

Ardeola minuta, Pr. Bonap. Geogr. Comp. List of B. p. 48.

Cancrophagus minutus, Kaup, Naturl. Syst. p. 42.

Butor minutus, Swains. Classif. of B. ii. p. 354.

Little Bittern, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 51, fig.; Selby, Brit. Orn. ii. p. 36; Yarr. Brit. B. 2 edit. ii. p. 533,

Little Bittern Heron, Penn. Brit. Zool. (1812) ii. p. 18, pl. 4.

Pl. enl. 323; Gould, B. of Eur. pl. 282.

a. Devonshire. From Col. Montagu's collection.

b. Leadenhall Market. Young. From Mr. J. Baker's collection.

#### 2. BOTAURUS.

Botaurus, Steph. Gen. Zool. xi. p. 592 (1819). Butor, Swains. Classif. of B. ii. p. 354 (1837).

### 1. BOTAURUS LENTIGINOSUS. The American Bittern.

Ardea lentiginosa, Mont. Orn. Diet. Suppl. pl. ; Leach, Syst. Cat. Mam. & B. B. M. p. 33; Temm. Man. d Orn. iv. p. 381; Flem. Brit. An. p. 96; Jenyns, Man. B. Vert. An. p. 191; Eyton, Cat. Brit. B. p. 37; Keys. & Bl. Wirbelth. Eur. p. 80.

Ardea stellaris, var. Lath. Ind. Orn. ii. p. 680. Botaurus freti Hudsonis, Briss. Orn. v. p. 449. Ardea minor, Wils. Amer. Orn. viii. pl. 65, f. 3. Butor americana, Swains. Classif. of B. ii. p. 354.

Arden mokobo, Vieill. N. Dict. d'Hist. Nat. xiv. p. 440.

Botaurus lentiginosus, Steph. Gen. Zool. xi. p. 596; Macgill. Man. N. H. Ornith. ii. p. 124; G. R. Gray, Gen. of B. ii. p. 557.

Freckled Heron, Mont. Orn. Dict. Suppl.

American Bittern, Selby, Brit. Orn. ii. p. 34; Yarr. Brit. B. 2 edit. ii. p. 545, fig.

Edwards' Birds, pl. 136; Gould, B. of Eur. pl. 284.

a. Dorsetshire. From Col. Montagu's collection.

b. Piddleton, Dorset. From Col. Montagu's collection.

### 2. BOTAURUS STELLARIS. The Common Bittern.

Ardea stellaris, Linn. S. N. i. p. 239; Leach, Syst. Cat. Mam. §
B. B. M. p. 33; Temm. Man. d'Orn. 1815, p. 373; Flem. Brit.
An. p. 95; Naum. Vög. Deuts. (1838) ix. p. 159, t. 226; Jenyns,
Man. B. Vert. An. p. 199; Keys. § Bl. Wirbelth, Eur. p. 80;
Schleg. Rev. Crit. des Ois. d'Eur. p. 98.

Botaurus stellaris, Steph. Gen. Zool. xi. p. 593; Boie, Isis (1822), p. 559; Brehm, Vög. Deuts. p. 595; Eyton, Cat. Brit. B. p. 37; Pr. Bonap. Geogr. Comp. List of B. p. 48; G. R. Gray, Gen. of

B. iii. p. 557.

Botaurus lacustris, Brehm, Vög. Deuts. p. 596. Botaurus arundinaceus, Brehm, Vög. Deuts. p. 596. Butor stellaris, Swains. Classif. of B. ii. p. 354.

Bittern, Mont. Orn. Diet; Bew. Brit. B. 1804, ii. p. 47, fig.

Common Bittern, Selby, Brit. Orn. ii. p. 30; Yarr. Brit. B. 2 edit. ii. p. 539, fig.

Bittern Heron, Penn. Brit. Zool. (1813) ii. p. 14. Pl. enl. 789; Gould, B. of Eur. pl. 280.

a. Devonshire. From Col. Montagu's collection.

b, c. London Market. From Mr. J. Baker's collection.

d. Trachea. England.

e. Sternum. England.

a-c. Great Britain.

f. Sternum. England. Presented by John Ray, Esq.

#### 3. NYCTICORAX.

Nycticorax, Steph. Gen. Zool. xi. p. 608 (1819). Nyctiardea, Swains. Classif. of B. ii. p. 354 (1837). Nyctirodius, Macgill. Man. N. H. Ornith. ii. p. 126 (1842). Scotaeus, Keys. & Bl. Wirbelth. Eur. p. 80 (1840).

### 1. NYCTICORAX GRISEUS. The Night Heron.

Ardea nycticorax, Linn. S. N. i. p. 235; Temm. Man. d'Orn. 1815, p. 375; Flem. Brit. An. p. 96; Jenyns, Man. B. Vert. An. p. 191; Naum. Vög. Deuts. (1838) ix. p. 139, t. 225; Schleg. Rev. Crit. des Ois. dEur p. 98. Ardea grisea, Linn. S. N. i. p. 239. Nycticorax griseus, G. R. Gray, Gen. of B. iii. p. 558. Nyctiardea europæa, Swains. Classif. of B. ii. p. 355. Ardea (Scotaeus) nycticorax, Keys. & Bl. Wirbelth. Eur. p. 80. Nycticorax europæus, Steph. Gen. Zool. xi. p. 609, pl. 47; Eyton, Cat. Brit. B. p. 37. Nycticorax nycticorax, Boie, Isis, 1822, p. 560. Nycticorax orientalis, Brehm, Vög. Deuts. p. 592, t. 31, f. 2. Nycticorax badius, Brehm, Vög. Deuts. p. 592. Nycticorax meridionalis, Brehm, Vog. Deuts. p. 593. Nycticorax Gardeni, Pr. Bonap. Geogr. Comp. List of B. p. 48. Nycticorax ardeola, Temm. Man. d'Orn. 1840, iv. p. 384. Nyctirodius nycticorax, Macgill. Man, N. H. Ornith. ii. p. 127. Night Heron, Mont. Orn. Dict.; Bew. Brit. B. 1804, ii. p. 43, fig.; Penn. Brit. Zool. (1812) ii. p. 23; Yarr. Brit. B. 2 edit. ii. p. 549, fig. Common Night Heron, Selby, Brit. Orn. ii. p. 39. Gardenian Heron, Penn. Brit. Zool. 1812, ii. p. 27, pl. 27. Pl. enl. 758; Gould, B. of Eur. pl. 279.

#### 4. PLATALEA.

Platalea, Linn. S. N. (1735). Platea, Briss. Ornith. v. p. 351 (1760). Pelecanus, Mæhr. Avium Gen. p. 60 (1752).

## 1. PLATALEA LEUCORODIA. The White Spoonbill.

Platalea leucorodia, Linn. S. N. i. p. 231; Temm. Man. d'Orn. 1815, p. 382; Brehm, Vög. Deuts. p. 600; Jenyns, Man. B. Vert. An. p. 193; Eyton, Cat. Brit. B. p. 38; Pr. Bonap. Geogr. Comp. List of B. p. 48; Schleg. Rev. Crit. des Ois. d'Eur. p. 101; Macgill. Man. N. H. Ornith. ii. p. 142; G. R. Gray, Gen. of B. iii. p. 559.

Platea leucorodia, Leach, Syst. Cat. Mam. & B. B. M. p. 33;

Flem. Brit. An. p. 94.

Platalea nivea, Cuv. Règ. An. i. p. 482; Brehm, Vög. Deuts.

p. 600, t. 31, f. 4.

Platalea leucorodius, Glog. Schelf. Fauna, p. 50; Naum. Vög. Deuts. (1838) ix. p. 312, t. 230; Keys. & Bl. Wirbelth. Eur. p. 81.

Spoonbill, Bew. Brit. B. 1804, ii. p. 25, fig.

White Spoonbill, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 3, pl. 1; Selby, Brit. Orn. ii. p. 51; Yarr. Brit. B. 2 edit. ii. p. 564, fig.

Pl. enl. 405; Gould, B. of Eur. pl. 279.

a. Devonshire. Female. From Col. Montagu's collection.
b. Sternum. England. Presented by John Ray, Esq.

iv. CICONINÆ.

1. CICONIA.

Ciconia, Linn. S. N. (1735). Spenorhynchus, Hemp. et Ehren.

### a. CICONIA.

### 1. CICONIA ALBA. The White Stork.

Ardea ciconia, Linn. S. N. i. p. 235.

Ciconia alba, Bechst. Naturg. Deuts. iv. p. 82; Temm. Man. d'Orn. 1815, p. 358; Boie, Isis, 1822, p. 560; Flem. Brit. An. p. 97; Brehm, Vög. Deuts. p. 573; Jenyns, Man. B. Vert. An. p. 194; Eyton, Cat. Brit. B. p. 38; Naum. Vög. Deuts. (1838) ix. p. 231, t. 228; Pr. Bonap. Geogr. Comp. List of B. p. 48; Keys. & Bl. Wirbelth. Eur. p. 81; Macgill. Man. N. H. Ornith. ii. p. 137; Schleg. Ren. Crit. des Ois. d'Eur. p. 99; G. R. Gray, Gen. of B. iii. p. 561.

Ciconia albescens, Brehm, Vog. Deuts. p. 574. Ciconia nivea, Brehm, Vög. Deuts, p. 574. Ciconia candida, Brehm, Vog. Deuts. p. 575.

Stork, Mont. Orn. Dict.

Stork, or White Stork, Bew. Brit. B. 1804, ii. p. 32, fig. White, or Common Stork, Selby, Brit. Orn. ii. p. 45. White Stork, Yarr. Brit. B. 2 edit. ii. p. 554, fig.

Pl. enl. 866; Gould, B. of Eur. pl. 283.

a. Great Britain.

b. Great Britain. From Mr. Turner's collection.

## CICONIA NIGRA. The Black Stork.

Ardea nigra, Linn. Faun. Suec. p. 163.

Ciconia nigra, Bechst. Naturg. Deuts. iv. p. 96; Temm. Man. d'Orn, 1815, p. 359; Leach, Syst. Cat. Mam. & B. B. M. p. 33; Flem. Brit. An. p. 97; Brehm, Vog. Deuts. p. 576; Jenyns, Man. B. Vert. An. p. 193; Eyton, Cat. Brit. B. p. 38; Naum. Vog. Deuts. (1838) ix. p. 279, t. 229; Keys. & Bl. Wirbelth. Eur. p. 80; Pr. Bonap, Geogr. Comp. List of B. p. 48; Schleg. Rev. Crit. des Ois. d'Eur. p. 99; Macgill. Man. N. H. Ornith. ii. p. 137; G. R. Gray, Gen. of B. iii. p. 561. Ciconia fusca, Brehm, Vög. Deuts. p. 576.

Black Stork, Mont. Linn. Trans. xii. p. 19; Selby, Brit. Orn. ii. p. 48; Yarr. Brit. B. 2 edit. ii. p. 558, fig.

Pl. enl, 399; Gould, B. of Eur. pl. 284.

a. Sedgmoor, Somersetshire. From Col. Montagu's collection.

### V. TANTALINÆ.

### 1. IBIS.

Ibis, Machr. Avium Gen. p. 71 (1752). Eudocimus, Wagl. Isis (1832), p. 1232. Falcinellus, Bechst. (1802). Plegadis, Kaup, Naturl. Syst. der Eur. Thier. p. 82 (1829). Tantalides, Wagl. Isis (1832), p. 1231.

## 1. IBIS FALCINELLUS. The Glossy Ibis.

Tantalus igneus, Gmel. S. N. i. p. 649. Tantalus falcinellus, Gmel. S. N. i. p. 648. Ibis sacra, Tenm. Man. dOrn. 1815, p. 385.

Tantalus viridis, Gmel. S. N. i. p. 648; Mont. Linn. Trans. ix. p. 198.

Numenius viridis, S. G. Gmel. Reis, i. p. 167. Plegadis falcinellus, Kaup, Naturl. Syst. p. 82. Ibis ignea, Leach, Syst. Cat. Mam. & B. B. M. p. 33. Tantalides falcinellus, Wagl. Isis, 1832, p. 1232.

Ibis falcinellus, Temm. Man. d'Orn. 1820, ii. p. 598; Boie, Isis, 1822, p. 560; Flem. Brit. An. p. 102; Brehm, Vög. Deuts. p. 606; Jenyns, Man. B. Vert. An. p. 194; Eyton, Cat. Brit. B. p. 38; Naum. Vög. Deuts. (1836) viii. p. 539, t. 219; Pr. Bonap. Geogr. Comp. List of B. p. 49; Macgill. Man. N. H. Ornith, ii. p. 140; Keys. & Bl. Wirbelth. Eur. p. 78; Schleg. Rev. Crit. des Ois. d'Eur. p. 100; G. R. Gray, Gen. of B. iii. p. 565.

Ibis castaneus, Brehm, Vog. Deuts. p. 606, t. 29, f. 3.

Glossy Ibis, Mont. Orn. Dict.; Penn. Brit. Zool. 1812, ii. p. 30, Selby, Brit. Orn. ii. p. 56; Yarr. Brit. B. 2 edit. ii. p. 571; fig.

Pl. enl. 819; Gould, B. of Eur. pl. 311.

a. Devonshire. Male. From Col. Montagu's collection.
b. Devonshire. Female. From Col. Montagu's collection.

### FAM. III. SCOLOPACIDÆ.

#### i. Limosinæ.

#### NUMENIUS.

Numenius, Mahr. Avium Gen. p. 74 (1752). Cracticornis, G. R. Gray, List of Gen. of B. (1841), p. 88. Phæopus, Cuv. Règ. An. (1817) i. p. 485.

### a. NUMENIUS.

#### 1. NUMENIUS ARQUATA. The Common Curlew.

Scolopax arquata, Linn. S. N. i. p. 242.

Numenius arquata, Lath. Ind. Orn. ii. p. 710; Temm. Man. d'Orn. 1815, p. 388; Boie, Isis 1822, p. 560; Leach, Syst. Cat. Mam. & B. B. M. p. 33; Flem. Brit. An. p. 101; Brehm, Vog. Deuts. p. 608; Jenyns, Man. B. Vert. An. p. 195; Eyton, Cat. Brit. B. p. 39; Naum. Vög. Deuts. (1836) viii. p. 476, t. 216; Keys. & Bl. Wirbelth. Eur. p. 78; Pr. Bonap. Geogr. Comp. List of B. p. 49; Schleg. Rev. Crit. des Ois. d'Eur. p. 95; Macgill. Man. N. H. Ornith. ii. p. 77; G. R. Gray, Gen. of B. iii. p. 569.

Numenius major, Steph. Gen. Zool. xii. p. 26.

Numenius medius, Brehm, Vog. Deuts. p. 609. Curlew, Bew. Brit. B. 1804, ii. p. 54, fig.

Common Curlew, Mont. Orn. Dict.; Penn. Brit. Zool. 1812, ii. p. 34, pl. 8; Selby, Brit. Orn. ii. p. 62; Yarr. Brit. B. 2 edit. ii. p. 577, fig.

Pl. enl. 818; Gould, B. of Eur. pl. 302.

- a. Great Britain.
- b. Devonshire. Female. From Col. Montagu's collection.
- c. Cambridgeshire. Very young. Presented by Mr. J. Baker.

## b. PHÆOPUS.

2. Numentus Phæopus. The Whimbrel.

Scolopax phæopus, Linn. S. N. i. p. 245.

Numenius phæopus, Lath. Ind. Orn. ii. p. 711; Temm. Mand'Orn. 1815, p. 389; Boic, Isis, 1822, p. 560; Flem. Brit. An. p. 101; Brehm, Vög. Deuts. p. 611; Jenyns, Man. B. Vert. An. p. 195; Eyton, Cat. Brit. B. p. 39; Naum. Vög. Deuts. (1836) viii. p. 506; Keys. & Bl. Wirbelth. Eur. p. 78; Pr. Bonap. Geogr. Comp. List of B. p. 49; Schleg. Rev. Crit. des Ois. d'Eur. p. 95; Macgill. Man. N. H. Ornith. ii. p. 78; G. R. Gray, Gen. of B. iii. p. 569.

Numenius minor, Leach, Syst. Cut. Mam. & B. B. M. p. 32.

Numenius islandicus, Brehm, Vog. Deuts. p. 610.

Scolopax borealis, Gmel. S. N. i. p. 654.

Numenius hudsonicus, Lath. Ind. Orn. ii. p. 712. Phæopus arquatus, Steph. Gen. Zool. xii. p. 36.

Whimbrel, Mont. Orn. Dict.; Bew. Brit. B. 1804, ii. p. 57, fig.; Penn. Brit. Zool. 1812, ii. p. 36, pl. ix.; Yarr. Brit. B. 2 edil. ii. p. 583, fig.

Whimbrel Curlew, Selby, Brit. Orn. ii. p. 65.

Pl. enl. 842; Gould, B. of Eur. pl. 303.

a. Hayling's Island. Presented by J. W. Tyndale, Esq.

b. Devonshire. Female. From Col. Montagu's collection. Kent. Female. Presented by N. A. Vigors, Esq.

d. Trachea. England.

e. Sternum. England. Presented by T. Ingall, Esq.

### 2. LIMOSA.

Limosa, Briss. Ornith. v. p. 261 (1760).
Actitis, Ill. Prodr. Mam. et Av. p. 262 (1811).
Limicula, Vieill. Analyse, &c. p. 56 (1816).
Numenius (pars.), Linn. S. N. (1735).
Xenus, Kaup, Naturl. Syst. der Eur. Thier. p. 115 (1829).
Terekia, Pr. Bonap. Geogr. Comp. List of B. p. 52 (1838).
Simorhynchus, Keys. & Bl. Wirbelth. Eur. p. 74 (1840).

## a. LIMOSA.

# 1. LIMOSA LAPPONICA. The Bar-tailed Godwit.

Limosa rufa, Briss. Orn. v. p. 281, t. 21, f. 1; Temm. Man. d'Orn. (1815) p. 432; Boie, Isis, 1822, p. 560; Leach, Syst. Cat. Mam. § B. B. M. p. 32; Flem. Brit. An. p. 107; Brehm, Vög. Deuts. p. 628; Jenyns, Man. B. Vert. An. p. 205; Eyton, Cat. Brit. B. p. 40; Naum. Vög. Deuts. (1836) viii. p. 446, t. 215; Keys. & Bl. Wirbelth. Eur. p. 74; Pr. Bonap. Geogr. Comp. List of B. p. 52; Schleg. Rev. Crit. des Ois. d'Eur. p. 87; Macgill. Man. N. H. Ornith. ii. p. 80.

Scolopax lapponica, Linn. S. N. i. p. 246. Fedoa rufa, Steph. Gen. Zool. xii. p. 77.

Limosa lapponica, G. R. Gray, Gen. of B. iii. p. 570.

Scolopax leucophæa, Lath. Ind. Orn. ii. p. 719.

Limicula lapponica, Vieill. N. Dict. d'Hist. Nat. iii. p. 250. Totanus leucophæus, Bechst. Naturg. Deuts. iv. p. 237. Totanus gregarius, Bechst. Naturg. Deuts. iv. p. 258.

Totanus glottis, Meyer, Taschenb. Deuts. ii. p. 372.

Limosa ferruginea, Pall. Zoogr. ii. p. 180.

Limosa Meyeri, Leisler, Nacht. zu Bechst. Naturg. Deuts. ii. p. 172; Temm. Man. d'Orn. 1815, p. 434; Brehm, Vög. Deuts. p. 627;

Naum. Vög. Deuts. (1836) viii. p. 214. Limosa noveboracensis, Leach, Syst. Cat. Mam. & B. B. M.

p. 32. Fedoa Meyeri, Steph. Gen. Zool. xii. p. 75. Fedoa pectoralis, Steph. Gen. Zool. xii. p. 79.

Actitis limosa, Ill. Prod. Mam. et Av. p. 262. Godwit, Bew. Brit. B. (1804) ii. p. 79, fig.; Mont. Orn. Dict. Red Godwit, Mont. Orn. Dict.; Bew. Brit. B. 1804, ii. p. 80, fig.; Selby, Brit. Orn. ii. p. 98.

Red Godwit Snipe, Penn. Brit. Zool. 1812, ii. p. 51, pl. xii.

Red-breasted Snipe, Penn. Brit. Zood, 1812, ii. p. 52; Mont. Linn. Trans. ix. p. 198; Mont. Orn. Dict. Supp.

Bar-tailed Godwit, Yarr. Brit. B. 2 edit. ii. p. 641, fig.

Pl. enl. 900; Gould, B. of Eur. pl. 306.

a. Great Britain. Male. Summer state. From Col. Montagu's collection.

b. Great Britain. Summer.

c. Kent. Female. Summer. From Col. Montagu's collection.

d. Great Britain. In change.

e. Norfolk. Male. In change. Presented by Rev. W. Whitear. f. Devonshire. Male. Young. From Col. Montagu's collection.

g. Great Britain. Winter.

h. Somersetshire. From Col. Montagu's collection.
i. Sternum. England. Presented by John Ray, Esq.

### 2. LIMOSA ÆGOCEPHALA. The Black-tailed Godwit.

Scolopax limosa, Linn. S. N. i. p. 244.

Totanus limosa, Bechst. Naturg. Deuts. iv. p. 244.

Totanus rufus, Bechst. Naturg. Deuts. iv. p. 253.

Limosa melanura, Leisl. Nacht. zu Bechst. Naturg. Deuts. ii. p. 150, 157; Temm. Man. d'Orn. 1815, p. 429; Brehm, Vög. Deuts. p. 627; Jenyns, Man. B. Vert. An. p. 203; Eyton, Cat. Brit. B. p. 40; Naum. Vög. Deuts. (1836) viii. p. 406, t. 212, 213; Schleg. Rev. Crit. des Ois. d'Eur. p. 87; Macgill. Man. N. H. Ornith. ii. p. 81.

Limicula melanura, Vieill. N. Dict. d'Hist. Nat. iii. p. 250.

Scolopax belgica, Gmel. S. N. i. p. 663.

Scolopax ægocephala, Linn. S. N. i. p. 246.

Totanus ægocephalus, Bechst. Naturg. Deuts. iv. p. 234.

Fedoa melanura, Steph. Gen. Zool. xii. p. 73.

Limosa jadreca, Leach, Syst. Cat. Mam. & B. B. M. p. 32.

Limosa ægocephala. Leach, Syst. Cat. Mam. & B. B. M. p. 34; Flem. Brit. An. p. 107; Keys. & Bl. Wirbelth. Eur. p. 74; Pr. Bonap. Geogr. Comp. List of B. p. 52; G. R. Gray, Gen. of B. iii. p. 570.

Limosa islandica, Brehm, Vog. Deuts. p. 626.

Jadreka Snipe, Mont. Orn. Dict.; Penn. Brit. Zool. 1812 ii. p. 53.

Red Godwit Snipe, Penn. Brit. Zool, 1812, ii. p. 51.

Black-tailed Godwit, Selby, Brit. Orn. ii. p. 94; Yarr. Brit. B. 2 edit. ii. p. 634, fig.

Pl. enl. 874, 916; Gould, B. of Eur. pl. 305.

- a. Lincolnshire. Male. From Col. Montagu's collection.
  b. Great Britain. Female. From Mr. Gould's collection.
- c, Great Britain. Male. From Mr. Gould's collection.
- d. Devoushire. Female. From Col. Montagu's collection.

e. Sandgate, Kent. Female.

f. Kent. Young.

y. Sternum. England. Presented by T. Ingall, Esq.

h. Skull. England.

## ii. TOTANINE.

## 1. TOTANUS.

Totanus, Bechst. Naturg. Deuts. p. (1802). Hyornis, Kaup, Naturl. Syst. der Eur. Thier. p. 156 (1829). Glottis, Nils. Gambetta, Kaup, Naturl. Syst. der Eur. Thier. p. 54 (1829). Erythroscelus, Kaup, Naturl. Syst. der Eur. Thier. p. 54 (1829). Rhyacophilus, Kaup, Naturl. Syst. der Eur. Thier. p. 140 (1829). Helodromas, Kaup, Naturl. Syst. der Eur. Thier. p. 144 (1829). Limicula, Leach, Syst. Cat. Mam. & B. B. M. p. 32 (1816). Symphemia, Rafinq. Catoptrophorus, Pr. Bonap. Syn. B. of U. S. p. 323 (1828). Hodites, Kaup, Naturl. Syst. der Eur. Thier. p. 155 (1829).

#### a. Totanus.

### 1. Totanus fuscus. The Spotted Redshank.

Totanus fuscus, Leisl. Nacht. zu Bechst. Naturg. Deuts. i. p. 47; Temm. Man. d'Orn. 1815, p. 412; Boie, Isis 1822, p. 569; Flem. Brit. An. p. 102; Brehm, Vög. Deuts. p. 633; Jenyns, Man. B. Vert. An. p. 196; Eyton, Cat. Brit. B. p. 44; Naum. Vog. Deuts. (1836) viii. p. 123, t. 200; Keys. & Bl. Wirbelth. Eur. p. 72; Pr. Bonap. Geogr. Comp. List of B. p. 51; Schleg. Rev. Crit. des Ois. d'Eur. p. 92; Macgill. Man. N. H. Ornith. ii. p. 93; G. R. Gray, Gen. of B. iii. p. 573. Scolopax fusca, Linn. S. N. i. p. 243. Scolopax Totanus, Gmel. S. N. i. p. 655. Totanus natans, Bechst. Naturg. Deuts. iv. p. 227; Brehm, Vög. Deuts. p. 635. Totanus maculatus, Bechst. Naturg. Deuts. iv. p. 203. Scolopax curonica, Gmel. S. N. i. p. 669. Scolopax cantabrigiensis, Gmel. S. N. i. p. 688. Tringa atra, Lath. Ind. Orn. ii. p. 738. Totanus ater, Brehm, Vög. Deuts. p. 634. Tringa longipes, Meis. & Schlinz. Vog. der Schweiz. p. 216. Totanus Raii, Leach, Syst. Cat. M. & B. B. M. p. 31? Erythroscelus fuscus, Kaup, Naturl. Syst. p. 54. Cambridge Godwit, Bew. Brit. B. 1804, ii. p. 84; Penn. Brit. Zool. 1812, ii. p. 58. Spotted Redshank, Bew. Brit. B. 1804, ii. p. 88, fig.; Yarr. Brit. B. 2 edit. ii. p. 587, fig. Spotted Snipe, Mont. Orn. Dict. & Suppl. pl.; Penn. Brit. Zool. 1812, ii. p. 59.

Pl. enl. 875; Gould, B. of Eur. pl. 309.

a. Suffolk. Presented by Mr. J. Leaman.

b. Kent. Young.

c. Somersetshire. Male. From Col. Montagu's collection.

d. Kent. Female.

e. Devonshire. Female, young.

### b. GAMBETTA.

## 2. TOTANUS CALIDRIS. The Common Redshank.

Scolopax calidris, Linn, S. N. i. p. 245.

Totanus calidris, Bechst. Naturg. Deuts. iv. p. 216; Temm. Man. d'Orn. 1815, p. 415; Leach, Syst. Cat. M. & B. B. M p. 31; Boie, Isis, 1822, p. 560; Flem. Brit. An. p. 102; Brehm, Vog. Deuts. p. 637; Jenyns, Man. B. Vert. An. p. 196; Eyton, Cat. Brit. B. p. 44; Naum. Vog. Deuts. (1836) viii. p. 95, t. 199; Keys. & Bl. Wirbelth. Eur. p. 62; Pr. Bonap. Geogr. Comp. List of B. p. 51; Schleg. Rev. Crit. des Ois. d'Eur. p. 93; Macgill. Man. N. H. Ornith. ii. p. 93; G. R. Gray, Gen. of B. iii. p. 573.

Tringa gambetta, Gmel. S. N. i. p. 671. Tringa striata, Gmel. S. N. i. p. 672.

Totanus littoralis, Brehm, Voy. Deuts. p. 636. Totanus striatus, Brehm, Vog. Deuts. p. 637.

Tringa variegata, Brünnich, Orn. n. 181. Gambetta calidris, Kaup, Naturl. Syst. p. 54.

Redshank, Mont. Orn. Dict.; Bew. Brit. B. 1804, ii. p. 91; Penn. Brit. Zool. 1812, ii. p. 57, pl. 10.

Redshank Sandpiper, Selby, Brit. B. ii. p. 72.

Common Redshank, Yarr. Brit. B. 2 edit. ii. p. 591, fig.

Pl. enl. 827, 845; Gould, B. of Eur. pl. 310.

a. Great Britain.

b. Kent. Male.

c. Lincolnshire. Male. From Col. Montagu's collection. d. Sternum. England. Presented by John Ray, Esq.

## c. HELODROMAS.

## 3. Totanus ochropus. The Green Sandpiper.

Tringa ochropus, Linn. S. N. i. p. 250. Totanus ochropus, Temm. Man. d'Orn. 1815, p. 420; Leach, Syst. Cat. Mam. & B. B. M. p. 30; Boie, Isis (1822), p. 650; Flem. Brit. An. p. 103; Brehm, Vog. Deuts. p. 641; Jenyns, Man. B. Vert. An. p. 197; Eyton, Cat. Brit. B. p. 44; Naum. Vog. Deuts. (1836) viii. p. 59, t. 197; Keys. & Bl. Wirbelth. Eur. p. 73; Pr. Bonap. Geogr. Comp. List of B. p. 51; Schleg. Rev. Crit. des Ois. d'Eur. p. 93; Macgill. Man. N. H. Ornith. ii. p. 94; G. R. Gray, Gen. of B. iii. p. 573.

Totanus rivalis, Brehm, Vog. Deuts. p. 642.

Totanus leucourus, Brehm, Vög. Deuts. p. 643. Helodromas ochropus, Kaup, Naturl. Syst. p. 144.

Green Sandpiper, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 100, fig.; Penm. Brit. Zool. (1813) ii. p. 86, pl. 15; Selby, Brit. Orn. ii. p. 75; Yarr. Brit. B. 2 edit. ii. p. 595, fig. Wood Sandpiper, Markw. Linn. Trans. i. p. 130, pl.

Pl. enl. 843; Gould, B. of Eur. pl. 315, f. 1.

a. Wiltshire. Male. From Col. Montagu's collection.

b. Wiltshire. From Col. Montagu's collection.

c, d. Epping. Presented by Henry Doubleday, Esq. e. Sternum. England. Presented by John Ray, Esq.

## d. RHYACOPHILUS.

## 4. Totanus Glareola. The Wood Sandpiper.

Tringa glareola, Linn. S. N. i. p. 250. Totanus glareola, Temm. Man. d'Ori

Totanus glareola, Temm. Man. d'Orn. 1815, p. 421; Boie, Isis (1822) p. 560; Flem. Brit. An. p. 103; Brehm, Vög. Deuts. p. 640; Jenyns, Man. B. Vert. An. p. 198; Eyton, Cat. Brit. B. p. 44; Naum. Vög. Deuts. (1836) viii. p. 78, t. 198; Keys. § Bl. Wirbelth. Eur. p. 72; Pr. Bomap. Geogr. Comp. List of B. 51; Schleg. Rev. Crit. des Ois. d'Eur. p. 93; Maegill. Man. N. H. Ornith. ii. p. 95; G. R. Gray, Gen. of B. iii. p. 573.

Totanus glareola, Leach, Syst. Cat. Mam. & B. B. M. p. 31.

Totanus sylvestris, Brehm, Vög. Deuts. p. 638. Totanus palustris, Brehm, Vög. Deuts. p. 639. Tringa littorea, Linn. Faun. Suec. p. 66. Tringa grallatoris, Mont. Orn. Dict. Append. Totanus grallatoris, Steph. Gen. Zool. xii. p. 148.

Totanus grallatoris, Steph. Gen. Zoot. XII. p. 148. Rhyacophilus glareola, Kaup, Naturl. Syst. p. 140. Wood Sandniper Mont Orn Diet & Syml. pl : Penn

Wood Sandpiper, Mont. Orn. Dict. & Suppl. pl.; Penn. Brit. Zool. (1812) ii. p. 88; Selby, Brit. Orn. ii. p. 77; Yarr. Brit. B. 2 edit. ii. p. 601, fig.

Long-legged Sandpiper, Mont. Orn. Dict. Append.

Gould, B. of Eur. pl. 315, f. 2.

a. Kent. Male. From Dr. Leach's collection.

b. Devonshire. Female. From Col. Montagu's collection.

### e. GLOTTIS.

### 5. Totanus glottis. The Greenshank.

Totanus glottis, Bechst. Naturg. Deuts, iv. p. 249; Temm. Man. d'Orn. 1815, p. 425; Boie, Isis (1822), p. 560; Flem. Brit. An. p. 104; Jenyns, Man. B. Vert. An. p. 200; Eyton, Cat. Brit. B. p. 43; Keys. & Bl. Wirbelth, Eur. p. 72; Schleg. Rev. Crit. des Ois. d'Eur. p. 92; G. R. Gray, Gen. of B. iii. p. 573.

Limosa totanus, Pall. Zoogr. ii. p. 183.

Scolopax canescens, Gmel. S. N. i. p. 668.

Totanus fistulans, Bechst. Naturg. Deuts, iv. p. 241. Totanus griseus, Bechst. Naturg. Deuts. iv. p. 231.

Glottis chloropus, Nils. Orn. Suec. ii. p. 57; Brehm, Vog. Deuts. p. 630; Pr. Bonap, Geogr. Comp. List of B. p. 51; Macgill. Man. N. H. Ornith. ii. p. 91.

Glottis canescens, Strichl.

Limicula glottis, Leach, Syst. Cat. Mam. & B. B. M. p. 32. Totanus chloropus, Meyer, Vog. Liv. u. Esthlands. p. 199.

Glottis grisea, Brehm, Vog. Deuts. p. 631.

Glottis fistulans, Brehm, Vog. Deuts. p. 631, t. 33, f. 2.

Glottis natans, Koch, Baier. Zool. i. p. 305.

Limosa glottis, Pall. Zoogr. ii. p. 179. Greenshank, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 86, fig.; Penn. Brit. Zool. (1812) ii. p. 55; Selby, Brit. Orn. ii. p. 86; Yarr. Brit. B. 2 edit. ii. p. 618, fig.

Cinereous Godwit, Penn. Brit. Zool. (1813) ii. p. 50, pl. 11.

Pl. enl. 876; Gould, B. of Eur. pl. 312.

a. Kent. Adult.

b. Carmarthen. Male. From Col. Montagu's collection.

c. London Market. From Mr. J. Baker's collection. d. Sternum. England. Presented by John Ray, Esq.

### 2. TRINGOIDES.

Tringoïdes, Pr. Bonap. Sagg. Distr. Met. An. Vert. (1831) p. 58. Actitis, Boie, Isis (1826), p. 979. Guinetta (Briss.), G. R. Gray, List of Gen. of B. (1840) p. 68. Actiturus, Pr. Bonap. Sagg. Distr. Met. An. Vert. (1832) p. Bartramia, Less. Tr. d'Orn. p. 553 (1831).

### a. Tringoides.

## 1. TRINGOIDES MACULARIA. The Spotted Sandpiper.

Tringa macularia, Linn. S. N. i. p. 249.

Totanus macularius, Temm. Man. d'Orn. 1815, p. 422; Boie, Isis (1822), p. 560; Flem. Brit. An. p. 103; Brehm, Vog. Deuts. p. 646; Jenyns, Man. B. Vert. An. p. 199; Eyton, Cat. Brit. B.

p. 44.

Actitis macularia, Boie, Isis (1826), p. 979; Naum. Vog. Deuts. (1836) viii. p. 34, t. 195; Keys. & Bl. Wirbelth. Eur. p. 73; Pr. Bonap. Geogr. Comp. List of B. p. 51; Schleg. Rev. Crit. des Ois. d'Eur. p. 91; Macgill. Man. N. H. Ornith. ii. p. 97.

Tringoides macularia, G. R. Gray, Gen. of B. iii. p. 574.

Spotted Sandpiper, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 79; Selby, Brit. Orn. ii. p. 84; Yarr. Brit. B. 2 edit. ii. p. 613, fig.

Edwards, Birds, pl. 277, f. 2; Gould, B. of Eur. pl. 317. (Norfolk).

### 2. TRINGOIDES HYPOLEUCA. The Common Sandpiper.

Tringa hypoleucus, Linn. S. N. i. p. 250.

Totanus hypoleucus, Temm. Man. d'Orn. 1815, p. 424; Flem. Brit. An. p. 104; Jenyns, Man. B. Vert. An. p. 199; Eyton, Cat. Brit. B. p. 44.

Tringa leucoptera, Pall. Zoogr. ii. p. 196. Tringa canutus, Linn. Faun. Suec. p. 65.

Totanus guinetta, Leach, Syst. Cat. Mam. & B. B. M. p. 30.

Actitis hypoleucus, Boie, Isis (1822), p. 649; Brehm, Voq. Deuts. p. 649, t. 33, f. 4; Naum. Vog. Deuts. (1836) viii. p. 7, t. 194; Keys. & Bl. Wirbelth. Eur. p. 73; Pr. Bonap. Geogr. Comp. List of B. p. 51; Schleg. Rev. Crit. des Ois. d'Eur. p. 91; Macgill. Man. N. H. Ornith, ii. p. 96.

Actitis cinclus, Boie, Isis (1826), p. 327; Brehm, Vog. Deuts. p. 648.

Actitis stagnalis, Brehm, Vöy. Deuts. p. 649.

Guinetta hypoleuca, G. R. Gray, List of Gen. of B. (1840) iii. p. 68. Tringoides hypoleuca, G. R. Gray, List of Gen. of B. (1841) iii. p. 88. Common Sandpiper, Mont. Orn. Diet.; Bew. Brit. B. (1804) ii. p.

104, fig.; Penn. Brit. Zool. (1812) ii. p. 90, pl. 16, low. fig.; Selby, Brit. Orn. ii. p. 81; Yarr. Brit. B. 2 edit. ii. p. 607, fig.

Spotted Sandpiper, Bew. Brit. B. (1804) ii. p. 111, fig.

Pl. enl. 850; Gould, B. of Eur. pl. 318.

a.

b. London Market. Male. From Dr. Leach's collection.
c. Pembrokeshire. Female. From Col. Montagu's collection.

d. Skull. England. Presented by John Ray, Esq.

## b. ACTITURUS.

# 3. TRINGOIDES RUFESCENS. The Buff-breasted Sandpiper.

Tringa rufescens, Vieill. N. Dict. d'Hist. Nat. t. 470; Gal. des Ois. t. 238; Yarr. Trans. Linn. Soc. xvi. p. 109, pl. 11; Jenyns, Man. B. Vert. An. p. 214; Eyton, Cat. Brit. B. p. 41; Keys. & Bl. Wirbelth. Eur. p. 77; Pr. Bonap. Geogr. Comp. List of B. p. 50; Temm. Man. d'Orn. (1840) iv. p. 408; Maegill. Man. N. H. Ornith. ii. p. 68; G. R. Gray, Gen. of B. iii. p. 579. Actitis rufescens, Schleg. Rev. Crit. des Ois. d'Eur. p. 92. The Buff-breasted Tringa, Selby, Brit. Orn. ii. p. 142. The Buff-breasted Sandpiper, Yarr. Brit. B. 2 edit. iii. p. 57, fig. Gould, B. of Eur. pl. 326. (Cambridgeshire and Norfolk).

## iii. RECURVIROSTRINÆ.

## 1. RECURVIROSTRA.

Recurvirostra, Linn. S. N. (1744). Trochilus, Mæhr. Avium Gen. p. 74 (1752). Avocetta, Briss. Orn. vi. p. 537 (1760).

## 1. RECURVIROSTRA AVOCETTA. The Avocet.

Recurvirostra avocetta, Linn. S. N. i. p. 256; Temm. Man. d'Orn. 1815, p. 380; Leach, Syst. Cat. Mam. & B. B. M. p. 34; Boie, Isis (1822), p. 560; Flem. Brit. An. p. 101; Brehm, Vög. Deuts. p. 685; Jenyns, Man. B. Vert. An. p. 201; Eyton, Cat. Brit. B. p. 45; Naum. Vög. Deuts. (1836) viii. p. 213, t. 204; Keys. & Bl. Wirbelth. Eur. p. 71; Pr. Bonap. Geogr. Comp. List of B. p. 54; Schleg. Rev. Crit. des Ois. d'Eur. p. 96; Maegill. Man. N. H. Ornith. ii. p. 87; G. R. Gray, Gen. of B. iii. p. 576.

Recurvirostra fissipes, Brehm, Vog. Deuts. p. 686, t. 35, f. 2.

Avocetta europæa, Dum.

Avoset, Bew. Brit. B. (1804) ii. p. 158, fig.; Yarr. Brit. B. 2 edit. ii. p. 624, fig.

Scooping Avoset, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 143; Selby, Brit. Orn. ii. p. 90.

Pl. enl. 353; Gould, B. of Eur. pl. 368.

a. South Wales. Male. From Col. Montagu's collection.

b. Sternum. England. Presented by John Ray, Esq.

#### 2. HIMANTOPUS.

Himantopus, Briss. Orn. v. p. 33 (1760). Macrotarsus, Lacep. Mem. de l'Inst. iii. p. (1800-1801). Hypsibates, Nitzsch, in Esch. und Gruber, Encycl. xvi. p. 150 (1827).

#### The Black-winged Stilt. 1. HIMANTOPUS CANDIDUS.

Charadrius himantopus, Linn. S. N. i. p. 255.

Himantopus melanopterus, Temm. Man. d'Orn. (1820), ii. p. 528; Boie, Isis (1822), p. 559; Brehm, Vog. Deuts. p. 682; Jenuns. Man. B. Vert. An. p. 201; Eyton, Cat. Brit. B. p. 45; Pr. Bonap. Geogr. Comp. List. of B. p. 54; Schleg. Rev. Crit. des Ois. d Eur. p. 96; Macgill. Man. N. H. Ornith. ii. p. 88.

Himantopus longipes, Brehm, Vög. Deuts. p. 683, t. 35, f. 1. Himantopus rufipes, Bechst. Naturg. Deuts. iv. p. 446, t. 25, f. 1; Brehm, Vog. Deuts. p. 681.

Himantopus Plinii, Flem. Brit. An. p. 112.

Himantopus atropterus, Meyer, Taschenb. Deuts. p. 315; Temm. Man. d'Orn. 1815, p. 338.

Himantopus candida, Bonn. Eneyc. Meth. p. 24; G. R. Gray, Gen. of B. iii. p. 577.

Himantopus vulgaris, Bechst, Ornith. Taschenb. ii, p. 325.

Hypsibates himantopus, Nitzsch, in Esch. und Gruber, Encycl. xvi. p. 150; Naum. Vog. Deuts. (1836) viii. p. 193, t. 203; Keys, & Bl. Wirbelth. Eur. p. 72.

Charadrius autumnalis, Husselq. Iter. p. 253. Himantopus albicollis, Vieill. Faune Franç. p. 269, t. 117, f. 2. Long-legged Plover, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 4, fig.; Penn. Brit. Zool. (1813) ii. p. 100.

Black-winged Stilt, Selby, Brit. Ornith. ii. p. 247; Yarr. Brit. B.

2 edit. ii. p. 629, fig.

Pl, enl, 878; Gould, B. of Eur. pl. 289.

a. Great Britain. Male. From Mr. Turner's collection.

b. Great Britain. Female. From Mr. Turner's collection.

### iv. TRINGINÆ.

## 1. PHILOMACHUS, Meehr.

Philomachus, *Mahr. Avium Gen.* p. 76 (1752). Machetes, *Cuv. Règ. An.* (1817) i. p. 490. Pavoncella, *Leach, Syst. Cat. Mam. & B. B. M.* p. 29 (1816).

#### 1. PHILOMACHUS PUGNAX. The Ruff.

Tringa pugnax, Linn. S. N. i. p. 247; Temm. Man. d Orn. 1815, p. 408; Flem. Brit. Anim. p. 110; Jenyns, Man. B. Vert. Anim. p. 207; Schleg. Rev. Crit. des Ois. d'Eur. p. 91.

Philomachus pugnax, G. R. Gray, List of Gen. of B. (1841) p. 89;

Gen. of B. iii. p. 579.

Totanus pugnax, Nils.; Savi, Ornit. Tosc. i. p. 263. Tringa rufescens, Bechst. Natury. Deuts. iv. p. 332.

Tringa littorea, Linn. S. N. i. p. 251.

Tringa Grenovicensis, Lath. Ind. Orn. ii. p. 731. Tringa equestris, Lath. Ind. Orn. ii. p. 730. Tringa variegata, Brünn. Orn. Bor. p. 54.

Machetes planiceps, Brehm, Vög. Deuts. p. 671.

Machetes alticeps, Brehm, Vög. Deuts. p. 670, t. 34, f. 4.

Machetes pugnax, Cuv. Règ. An. i. p. 490; Boie, Isis (1822), p. 561; Brehm, Vög. Deuts. p. 672; Eyton, Cat. Brit. B. p. 41; Naum. Vög. Deuts. (1834) vii. p. 502, t. 190—193; Keys. & Bl. Wirbelth. Eur. p. 75; Pr. Bonap. Geogr. Comp. List of B. p. 50; Macqill. Man. N. H. Ornith. ii. p. 75.

Pavoncella pugnax, Leach, Syst. Cat. Mam. & B. B. M. p. 29.
 Ruff, Mont. Orn. Dict.; Bew. Brit. B. (1812) ii. p. 95, fig.;
 Penn. Brit. Zool. (1812) ii. p. 71, pl. 14; Selby, Brit. Orn. ii. p.

130; Yarr. Brit. B. 2 edit. ii. p. 645, fig.

Red-legged Sandpiper, Bew. Brit. B. (1804) ii. p. 113, fig. Greenwich Sandpiper, Bew. Brit. B. (1804) ii. p. 108.

Yellow-legged Sandpiper, Mont. Orn. Dict. App.; Penn. Brit. Zool. (1812) ii. p. 70.

Pl. enl. 305, 306, 300, 844; Gould, B. of Eur. pl. 328.

a. Great Britain. Male. b-g. Lincolnshire. Males.

A. Great Britain. Male. From Col. Montagu's collection.

i. Lincolnshire. Male. From Col. Montagu's collection. j. Lincolnshire. Female. From Col. Montagu's collection.

k. Edinburgh. From Mr. Bullock's collection.

Lincolnshire. Female. From Col. Montagu's collection.
 Male.

n. Cambridgeshire. Presented by Mr. J. Baker.

o, p. Two Sterna. England. Presented by T. Ingall, Esq. q. Sternum. England. Presented by John Ray, Esq.

#### 2. TRINGA.

Tringa, Linn. S. N. (1735).
Calidris, Cuv. Règ. An. (1817) i. p. 489.
Canutus, Brehm (1830).
Ancylocheilus, Kaup, Naturl. Syst. der Eur. Thier. p. 50 (1829).
Leimonites, Kaup, Naturl. Syst. der Eur. Thier. p. 37 (1829).
Actodromas, Kaup, Naturl. Syst. der Eur. Thier. p. 55 (1829).
Falcinellus, Kaup, Naturl. Syst. der Eur. Thier. p. 37 (1829).
Erolia, Vieill. Analyse, &c., p. 55 (1816).
Falcinellus, Cuv. Reg. An. (1817) i. p. 486.

#### a. CANUTUS.

#### 1. TRINGA CANUTUS. The Knot.

Tringa canutus, Linn. S. N. i. p. 251; Leach, Syst. Cat. Mam. & B. B. M. p. 29; Flem. Brit. An. p. 109; Jenyns, Man. B. Vert. An. p. 213; Eyton, Cat. Brit. B. p. 41; Keys. & Bl. Wirbelth. Eur. p. 76; Pr. Bonap. Geogr. Comp. List of B. p. 49; Schleg. Rev. Crit. des Ois. d'Eur. p. 88; Macgill. Man. N. H. Ornith. ii. p. 67; G. R. Gray, Gen. of B. iii. p. 579. Tringa ferruginea, Brünn. Orn. No. 180. Tringa islandica, Gmel. S. N. i. p. 682; Leach, Syst. Cat. Mam. & B. B. M. p. 29; Naum. Vog. Deuts. (1834) vii. p. 372, t. 183. Tringa grisea, Gmel. S. N. i. p. 681. Tringa cinerea, Gmel. S. N. i. p. 673; Temm. Man. d'Orn. 1815, p. 404; Boie, Isis (1822), p. 560. Tringa calidris, Linn. S. N. i. p. 253. Tringa nævia, Gmel. S. N. i. p. 681. Tringa ferruginea, Meyer, Taschenb. Deuts. ii. p. 395. Tringa australis, Lath. Ind. Orn. ii. p. 737. Canutus islandicus, Brehm, Vog. Deuts. p. 654. Canutus cinereus, Brehm, Vög. Deuts. p. 655, t. 34, f. 2. Knot, Mont. Orn. Dict.; Selby, Brit. Orn. ii. p. 138; Yarr. Brit. B. 2 edit. iii. p. 52, fig.

Red Saudpiper, Bew. Brit. B. (1804) ii. p. 116; Mont. Orn. Dict.; Penn, Brit. Zool. (1812) ii. p. 89.

Ash-coloured Sandpiper, Bew. Brit. B. (1804) ii. p. 103; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 78.

Pl. enl. 366, 365; Gould, B. of Eur. pl. 324.

a. Essex. Male. Summer.

b. Norfolk. Female. Presented by Rev. W. Whitear.

c. — Female. Summer. From Col. Montagu's collection.
d. Carmarthen. Male. Winter. From Col. Montagu's collection.

e. Devonshire. Male. Summer. Presented by W. Comyns, Esq.

f. — In change.

h. Carmarthen. Female. Winter. From Col. Montagu's collection.

i. Leadenhall Market. From Mr. J. Baker's collection.
j. Sternum. England. Presented by John Ray, Esq.

## b. TRINGA.

## 2. TRINGA MARITIMA. The Purple Sandpiper.

Tringa maritima, Brünn. Orn, Bor. No. 182; Temm. Man. d'Orn. (1820) p. 619; Brehm, Vög. Deuts. p. 651, t. 34, f. 1; Jenyns, Man. B. Vert. An. p. 211; Eyton, Cat. Brit. B. p. 42; Naum. Vög. Deuts. (1834) vii. p. 467, t. 188; Keys. & Bl. Wirbelth. Eur. p. 76; Pr. Bonap. Geogr. Comp. List of B. p. 49; Macgill. Man. N. H. Ornith. ii. p. 67; G. R. Gray, Gen. of B. iii. p. 57; Tringa nigricans, Mont. Linn. Trans. iv. p. 40, pl. 2; Leach, Syst. Cat. Mam. & B. B. M. p. 30; Brehm, Vög. Deuts. p. 652.

Tringa striata, Flem. Brit. An. p. 110.

Tringa arquatella, Pall. Zoogr. ii. p. 190. Tringa canadensis, Lath. Ind. Orn. Suppl. p. 65.

Tringa littoralis, Brehm, Vog. Deuts. p. 652.

Totanus maritimus, Steph. Gen. Zool. xii. p. 146. Knot, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 75, fig.; Penn. Brit. Zool. (1812) ii. p. 76.

Black Sandpiper, Penn. Brit. Zool. (1812) ii. p. 81. Purple or Rock Tringa, Selby, Brit. Orn. ii. p. 150. Selninger Sandpiper, Penn. Brit. Zool. (1812) ii. p. 80.

Purple Sandpiper. Yarr. Brit. B. 2 edit. iii. p. 88, fig.

Gould, B. of Eur. pl. 344.

- a. Somersetshire. Winter. Male. From Col. Montagu's collection.
- b. Great Britain. Winter. Female. From Col. Montagu's collection.
- c. Cornwall. Presented by D. W. Mitchell, Esq.
- d. Sternum. England. Presented by T. Ingall, Esq.
- e. Sternum. England.

### 3. TRINGA PECTORALIS. The Pectoral Sandpiper.

Tringa pectoralis, Say, Long's Exped. i. p. 171; Pr. Bonap. Syn. of Birds U. S. p. 318; Amer. Orn. iv. p. 43, pl. 23, f. 2; Jenyns, Man. B. Vert. An. p. 210; Eyton, Cat. Brit. B. p. 41; Keys. & Bl. Wirbelth. Eur. p. 77; Temm. Man. d'Orn. (1840) iv. p. 397; Schleg. Rev. Crit. des Ois. d'Eur. p. 89; Macgill. Man. N. H. Ornith. ii. p. 69; G. R. Gray, Gen. of B. iii. p. 579. Pelidna pectoralis, Pr. Bonap. Geogr. Comp. List of B. p. 50. Pectoral Sandpiper, Eyton, R. Brit. B. p. 42, fig.; Yarr. Brit. B. 2 edit. iii. p. 77, fig. Gould, B. of Eur. pl. 327.

Goula, B. of Eur. pl. 327.

(Breydon Broad, Yarmouth and Penzance).

## 4. TRINGA SCHINZII. Schinz's Sandpiper.

Tringa Schinzii, Pr. Bonap. Syn. B. of U. S. p.; Naum. Vög. Deuts. (1834) vii. p. 453, t. 187? Eyton, Fauna of Shropshire, Ann. Nat. Hist. ii. p. 53; Macgill. Man. N. H. Ornith. ii. p. 72; G. R. Gray, Gen. of B. iii. p. 579. Pelidna Schinzii, Pr. Bonap. Geogr. Comp. List of B. p. 50? Tringa cinclus minor, Schleg. Rev. Crit. des Ois. d'Eur. p. 89? Tringa pygmæa, Schinz, Cuv. Règ. Anim. Deuts. Wherpe, i. p. 782. Tringa Bonapartei, Schleg. Rev. Crit. des Ois. d'Eur. p. 89; Thomp. Ann. & Mag. Nat. Hist. (1846) p. 311. Schinz's Sandpiper, Yarr. Brit. B. 2 edit. iii. p. 74, fig. Gould, B. of Eur. pl. 330.

(Stoke Heath, Shropshire, and Ireland).

#### 5. TRINGA ALPINA. The Dunlin.

Tringa alpina, Linn. S. N. i. p. 249; Leach, Syst. Cat. Mam. & B. B. M. p. 30; Boie, Isis (1822), p. 561; Flem. Brit. An. p. 108; Naum. Vog. Deuts. (1834) vii. p. 427, t. 186; Eyton, Cat. Brit. B. p. 42.

Tringa cinclus, Linn. S. N. i. p. 251; Leach, Syst. Cat. Mam. & B. B. M. p. 30; Keys. & Bl. Wirbelth. Eur. p. 76; Schleg. Rev. Crit. des Ois. d'Eur. p. 89; Macgill. Man. N. H. Ornith. ii. p.

70; G. R. Gray, Gen. of B. iii. p. 579.

Tringa ruficollis, Pall. Reis. iii. p. 700. Tringa pusilla, Gmel. S. N. i. p. 663.

Numenius variabilis, Bechst. Naturg. Deuts. iv. p. 141.

Tringa variabilis, Meyer, Taschenb. Deuts. ii. p. 397; Temm. Man. d Orn. 1815, p. 395; Jenyns, Man. B. Vert. An. p. 209. Pelidna cinclus, Pr. Bonap. Geogr. Comp. List. of B. p. 50.

Pelidna variabilis, Steph. Gen. Zoot. xii. p. 98; Brehm, Vog. Deuts. p. 662.

Pelidua alpina, Boie, Brehm, Vog. Deuts. p. 661.

Purre, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 119, fig.; Penn. Brit. Zool. (1812) ii. p. 94.

Dunlin, Bew. Brit. B. (1804) ii. p. 117, fig.; Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 92; Yarr. Brit. B. 2 edit. iii. p. 81, fig.

Gould, B. of Eur. pl. 329.

a. Carmarthenshire. Summer. Male. From Col. Montagu's collection.

b. Cornwall. Young. Male. From Col. Montagu's collection. c. Great Britain. From Col. Montagu's collection.

d. Great Britain. Winter. From Col. Montagu's collection.

e. Devonshire. Summer, Female. f. Great Britain. In change.

g. Loudon Market. Summer. Female.

h-j. Hayling Island. Presented by J. W. Tyndale, Esq.

k. Cambridgeshire. Presented by Mr. J. Baker.

- !-n. Sanda, Orkney. Very young. From Mr. J. Baker's collection.
- o. Sanda. Adult. From Mr. J. Baker's collection. p. Cambridgeshire. From Mr. J. Baker's collection.
- q. Sternum. England. Presented by John Ray, Esq.

#### c. ACTODROMAS.

#### 6. TRINGA MINUTA. The Little Stint.

Tringa minuta, Leisler, Nachtr. zu Bechst. Naturg. Deuts. i. p. 74; Temm. Man. d'Orn. 1815, p. 403; Boie, Isis (1822), p. 561; Flem. Brit. An. p. 109; Jenyns, Man. B. Vert. An. p. 212; Naum. Vög. Deuts. (1834) vii. p. 391, t. 184; Keys. & Bl. Wirbelth. Eur. p. 77; Schleg. Rev. Crit. des Ois. d'Eur. p. 90; Macgill. Man. N. H. Ornith. ii. p. 73; G. R. Gray, Gen. of B. ii. p. 579. Tringa cinclus, Pall. Zoogr. ii. p. 201. Tringa pusilla, Wolf und Meyer, Taschenb. ii. p. 391. Tringa Temminckii, Koch, Baier. Zool. i. p. 292. Pelidna minuta, Boie, Isis (1826), p. 979; Brehm, Vog. Deuts. p. 665; Pr. Bonap. Geogr. Comp. List of B. p. 50. Pelidna pusilla, Brehm, Vög. Deuts. p. 666. Actodromas minuta, Kaup, Naturl. Syst. p. 55. Little Stint, Bew. Brit. B. (1804) ii. p. 122, fig.; Yarr. Brit. B. 2 edit. ii. p. 66, fig. Little Sandpiper, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii.

p. 95. Brown Sandpiper, *Penn. Brit. Zool.* (1812) ii. p. 93. Minute Tringa, *Selby, Brit. Orn.* ii. p. 147.

Gould, B. of Eur. pl. 332.

a. Somersetshire.

- b. Epping. Summer. Presented by Henry Doubleday, Esq.
- c. Sternum. England. Presented by T. Ingall, Esq.
- d. Sternum. England. Presented by John Ray, Esq.
- e. Skull. England. Presented by John Ray, Esq.

## d. Leimonites.

## 7. TRINGA TEMMINCKII. Temminck's Stint.

Tringa Temminckii, Leisler, Nachtr. zu Bechst. Naturg. Deuts. i. p. 95; Temm. Man. d'Orn. 1815, p. 401; Boie, Isis (1822), p. 561; Jenyns, Man. B. Vert. An. p. 211; Naum. Vög. Deuts. (1834) vii. p. 483, t. 189; Keys. & Bl. Wirbelth. Eur. p. 77; Eyton, Cat. Brit. B. p. 42; Schleg. Rev. Crit. des Ois. d'Eur. p. 90; Macgill. Man. N. H. Ornith. ii. p. 73; G. R. Gray, Gen. of B. iii. p. 579. Tringa pusilla, Lath. Ind. Orn. ii. p. 737; Bechst. Naturg. Deuts. iv. p. 308; Flem. Brit. An. p. 108.

Pelidna Temminckii, Boie, Isis (1826), p. 979; Brehm, Vög. Deuts. p. 667; Pr. Bonap. Geogr. Comp. List of B. p. 50.
Leimonites Temminckii, Kaup, Naturl. Syst. p. 37.
Little Sandpiper, Mont. Orn. Dict. App. pl.
Temminck's Tringa, Selby, Brit. Orn. ii. p. 144.
Temminck's Sandpiper, Eyton, R. Brit. B. p. 44, fig.
Temminck's Stint, Yarr. Brit. B. 2 edit. ii. p. 70, fig.

Gould, B. of Eur. pl. 333.

a. Devonshire. Winter. From Col. Montagu's collection.

### e. ANCYLOCHEILUS.

8. TRINGA SUBARQUATA. The Curlew Sandpiper.

Scolopax subarquata, Guldenst. Comm. Petrop. xix. p. 471; Gmel. S. N. i. p. 658.

Scolopax africanus, Gmel. S. N. i. p. 655.

Numenius subarquata, Bechst. Naturg. Deuts. iv. p. 135.

Numenius pygmæus, Bechst. Naturg. Deuts. iv. p. 148.

Numenius africanus, Lath. Ind. Orn. ii. p. 712.

Tringa pygmæa, Leuch, Syst. Cat. Mam. & B. B. M. p. 30.

Tringa subarquata, Temm. Man. d'Orn. 1815, p. 393; Boie, Isis (1822), p. 560; Flem. Brit. An. p. 107; Naum. Vög. Deuts. (1834) vii. p. 408, t. 185; Jenyns, Man. B. Vert. An. p. 208; Eyton, Cat. Brit. B. p. 42; Keys. & Bl. Wirbelth. Eur. p. 76; Schleg. Rev. Crit. des Ois. d'Eur. p. 88; Macgill. Man. N. H. Ornith. ii. p. 71; G. R. Gray, Gen. of B. iii. p. 579.

Pelidna subarquata, Cuv., Brehm, Vog. Deuts, p. 657; Pr. Bonap. Geogr. Comp. List of B. p. 50.

Ancylocheilus subarquata, Kaup, Naturl. Syst. p. 50.

Tringa falcinella, Pall. Zoogr. ii. p. 188.

Tringa ferruginea, Brünn, Orn. Bor. No. 180.

Numenius ferrugineus, Wolf und Meyer, Taschenb. ii. p. 356.

Pelidna macrorhynchos, Brehm, Vög. Deuts. p. 658.

Tringa islandica, Retz. Faun. Suec. p. 192.

Scolopax Dethardingii, Bechst. von Lath. Syn. v. p. 130, t. 123.

Pigmy Curlew Mont. Orn. Dict. & Suppl. pl.

Red Sandpiper, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 89, pl, xvii.

Curlew Tringa, Selby, Brit. Orn. ii. p. 157.

Curlew Sandpiper, Yarr. Brit. B. 2 edit. ii. p. 47, fig.

Gould, B. of Eur. pl. 328.

- a. Isle of Grain. Summer. From Mr. Gould's collection.
- b. Orkney. In change. Presented by Dr. Edmonston.
- c. Epping. Presented by Henry Doubleday, Esq.
- d. Norfolk. Winter. Presented by the Rev. W. Whitear.
- e. Yarmouth. Summer. Presented by Mr. C. Hubbard.
- f. London Market. From Mr. J. Baker's collection.
- g. Sternum. England. Presented by John Ray, Esq.

## f. LIMICOLA.

### 9. TRINGA PYGMÆA. The Broad-billed Sandpiper.

Numenius pygmæus, Lath. Ind. Orn. ii. p. 713.

Tringa platyrhyncha, Temm. Man. d'Orn. (1820) ii. p. 616; Keys. & Bl. Wirbelth. Eur. p. 90; Macgill. Man. N. H. Ornith. ii. p.

72; G. R. Gray, Gen. of B. iii. p. 579.

Numenius pusillus, Bechst. Naturg. Deuts. iv. p. 152.

Limicola pygmæa, Koch, Baier. Zool. i. p. 315; Naum. Vög. Deuts. (1836), p. 271, t. 207.

Tringa pygmæa, Savi, Ornit. Tosc. ii. p. 291.

Pelidna platyrhyncha, Cuv., Pr. Bonap. Geogr. Comp. List of B. p. 50.

Tringa eloriodes, Vieill. N. Dict. d'Hist. Nat. xxxiv. p. 465; Fauna Franc. p. 287, t. 126, f. 1.

Broad-billed Sandpiper, Yarr. Brit. B. 2 edit. ii. p. 61, fig.

Gould, B. of Eur. pl. 331.

(Norfolk).

#### 3. CALIDRIS.

Calidris, Cuv. Anat. Comp. i. Tab. Sec. Cl. des Ois. (1799-1800). Arenaria, Meyer, Taschenb. Deuts. ii. p. 326 (1810).

## 1. CALIDRIS ARENARIA. The Sanderling.

Tringa arenaria, Linn. S. N. i. p. 255; Schleg. Rev. Crit. des Ois. d'Eur. p. 90.

Charadrius calidris, Linn. S. N. i. p. 255.

Arenaria calidris, Meyer, Taschenb. Deuts. vii. p. 68, t. 59, f. 4.

Arenaria vulgaris, Bechst. Deuts. Taschenb. ii. p. 462; Temm. Man. d'Orn. 1815, p. 334; Steph. Gen. Zool. xi. p. 490, pl. 35.

Calidris arenaria, Leach, Syst. Cat. Mum. & B. B. M. p. 28; Flem. Brit. An. p. 112; Brehm, Vög. Deuts. p. 673; Naum. Vög. Deuts. (1834) vii. p. 353, t. 182; Jenyns, Man. B. Vert. An. p. 183; Eyton, Cat. Brit. B. p. 42; Fr. Bonap. Geogr. Comp. List of B. p. 50; Keys. & Bl. Wirbelth. Eur. p. 75; Macgill. Man. N. H. Ornith. ii. p. 65; G. R. Gray, Gen. of B. ii. p. 581. Charadrius rubidus, Gme'. S. N. i. p. 688.

Arenaria grisea, Bechst. Naturg. Deuts. iv. p. 368.

Calidris grisea, Brehm, Vog. Deuts. p. 674.

Tringa tridactyla, Pall. Zoogr. ii. p. 198.

Sanderling, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 1, fig.; Penn. Brit. Zool. (1812) ii. p. 106, pl. 18; Yarr. Brit. B. 2 edit. ii. p. 491, fig.

Common Sanderling, Selby, Brit. Orn. ii. p. 208.

Gould, B. of Eur. pl. 335.

a. Great Britain.

b. Carmarthen. From Col. Montagu's collection.

c, d. Great Britain.

- e. Great Britain. Presented by J. Gould, Esq.
- f. Cornwall. Young. From Col. Montagu's collection.

g. Great Britain. Young.

h. Inverness. Adult. From Mr. J. Baker's collection.
 i. Southend. Young. From Mr. J. Baker's collection.
 j. Sternum. England. Presented by T. Ingall, Esq.

## v. SCOLOPACINÆ.

# 1. MACRORAMPHUS.

Macroramphus, Leach, Syst. Cat. Mam. & B. B. M. p. 31 (1816). Lymnodromus, Pr. Max. (183?)

# 1. MACRORAMPHUS GRISEUS. The Brown Snipe.

Scolopax grisea, Gmel. S. N. i. p. 658; Temm. Man. d'Orn. (1820) ii. p. 679; Flem. Brit. An. p. 106; Jenyns, Man. B. Vert. An. p. 207; Schleg. Rev. Crit. des Ois. d'Eur. p. 86.

Scolopax noveboracensis, Gmel. S. N. i. p. 658. Scolopax Paykullii, Nils. Orn. Suec. ii. p. 106.

Totanus noveboracensis, Sabine, Frankl. Journ. App. p. 687.

Macroramphus griseus, Leach, Syst. Cat. Mam. & B. B. M. p. 31; Steph. Gen. Zool. xii. p. 61, pl. 9; Eyton, Cat. Brit. B. p. 40; Pr. Bonap. Geogr. Comp. List of B. p. 52; Keys. & Bl. Wirbelth. Eur. p. 75; Macgill. Man. N. H. Ornith. ii. p. 100; G. R. Gray, Gen. of B. iii. p. 582.

Brown Snipe, Mont. Orn. Dict. & Suppl. pl.; Penn. Brit. Zool. (1812) ii. p. 65; Yarr. Brit. B. 2 edit. iii. p. 43, fig.

Red-breasted Snipe, Mont. Linn. Trans. iv. p. 198; Mont. Orn. Dict. Suppl. pl.; Eyton, R. Brit. B. p. 36. fig.

Gould, B. of Eur. pl. 323.

a. Devonshire. Winter. From Col. Montagu's collection.
b. Norfolk. Very young. From Mr. J. Baker's collection.

#### 2. GALLINAGO.

Gallinago, Leach, Syst. Cat. Mam. & B. B. M. p. 31 (1816). Numenius, Linn. S. N. (1735).

Telmatias, Boie, Isis (1826) p. 980.
Ascalopex, Keys. & Bl. Wirbelth. Eur. p. 78 (1840).
Pelorychus, Kaup, Naturl. Syst. der Eur. Thier. p. 119 (1829).
Enalius, Kaup, Naturl. Syst. der Eur. Thier. p. 121 (1829).
Xylocota, Pr. Bonap. (1839).
Homoptilura, G. R. Gray, List of Gen. of B. (1840) p. 70.
Lymnocryptes, Kaup, Naturl. Syst. der Eur. Thier. p. 118 (1829).
Philolimnos, Brehm, Vög. Deuts. p. 622 (1831).

#### a. Gallinago.

## 1. Gallinago major. The Great Snipe.

Scolopax major, Gmel. S. N. i. p. 661; Temm. Man. d'Orn. 1815, p. 438; Flem. Brit. An. p. 105; Naum. Vög. Deuts. (1836) viii. p. 291, t. 208; Jenyns, Man. B. Vert. An. p. 205; Eyton, Cat. Brit. B. p. 39; Schleg. Rev. Crit. des Ois. d'Eur. p. 86. Gallinago major, Leach, Syst. Cat. Mam. & B. B. M. p. 31; Steph. Gen. Zool. xii. p. 61, pl. 8; Pr. Bonap, Geogr. Comp. List of B. p. 52; G. R. Gray, Gen. of B. iii. p. 583. Gallinago Montagui, Pr. Bonap. Geogr. Comp. List of B. p. 52. Telmatias major, Brehm, Vög. Deuts. p. 615. Telmatias gallinago, Boie, Isis (1826), p. 980. Telmatias nisoria, Brehm, Vög. Deuts. p. 616. Scolopax media, Frisch. Vög. t. 228. Scolopax paludosa, Retz. Faun. Suec. p. 175.

Scolopax palustris, Pall. Zoogr. ii. p. 173,

Ascalopax major, Keys. & Bl. Wirbelth. Eur. p. 78.

Scolopax solitaria, Macgill. Man. N. H. Ornith. ii. p. 102.

Great Snipe, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 67;
 Penn. Brit. Zool. (1812) ii. p. 62; Selby, Brit. Orn. ii. p. 115;
 Yarr. Brit. B. 2 edit. iii. p. 18, fig.

Solitary Snipe, Bew. Brit. B. (1804) ii. p. 67, note.

Gould, B. of Eur. pl. 320.

- a. Suffolk. Male. From Col. Montagu's collection.
- b. Kent. Male. From Col. Montagu's collection.
- c. Sternum. England. Presented by John Ray, Esq.

# ENALIUS (?)

## 2. ? GALLINAGO SABINII. Sabine's Snipe.

Scolopax Sabinii, Vigors, Linn. Trans. xiv. p. 556, pl. 21; Jard. & Selby, Illustr. Ornith. pl. 27; Flem. Brit. An. p. 105; Jenyns, Man. B. Vert. An. p. 204; Eyton, Cat. Brit. B. p. 40; Schleg. Rev. Crit. des Ois. d'Eur. p. 86; Macgill. Man. N. H. Ornith. ii. p. 102.

Gallinago Sabini, Pr. Bonap. Geogr. Comp. List of B. p. 52; G. R.

Gray, Gen. of B. iii. p. 583.

Ascalopax Sabini, Keys. & Bl. Wirbelth, Eur. p. 77.

Enalius Sabini, Kaup, Naturl. Syst. p. 121. Xylocota Sabini, Pr. Bonap.

Homoptilura Sabini, G. R. Gray, List of Gen. of B. (1840) p. 70. Sabine's Suipe, Selby, Brit, Orn. ii. p. 118; Yarr. Brit. B. 2 edit. iii. p. 39, fig.

Gould, B. of Eur. pl. 321, f. 1.

(Queen's County, Ireland, and Heron Court, Hampshire).

## 3. GALLINAGO MEDIA. The Common Snipe.

Scolopax gallinago, Linn. S. N. i. p. 244; Temm. Man. d Orn.
 1815, p. 439; Flem. Brit. An. p. 106; Jenyns, Man. B. Vert.
 An. p. 205; Naum. Vög. Deuts. (1836) viii. p. 310, t. 209; Eyton,
 Cat. Brit. B. p. 39; Schleg. Rev. Crit. des Ois. d Eur. p. 86;
 Maegill. Man. N. H. Ornith. ii. p. 103.

Telmatias gallinago, Boie, Isis (1826), p. 979; Brehm, Vög. Deuts.

p. 620.

Gallinago media, Leach, Syst. Cat. Mam. & B. B. M. p. 31; Steph. Gen. Zool. xii. p. 54; G. R. Gray, Gen. of B. iii. p. 583.

Gallinago scolopacinus, Pr. Bonap. Geogr. Comp. List of B. p. 52. Scolopax grallinaria, Gmel. S. N. i. p. 662.

Ascalopax gallinago, Keys. & Bl. Wirbelth. Eur. p. 77.

Telmatias septentrionalis, Brehm, Vog. Deuts. p. 619.

Telmatias stagnatilis, Brehm, Vög. Deuts. p. 618.

Telmatias Færæensis, Brehm, Vög. Deuts. p. 617.

Common Snipe, Mont. Orn. Dict; Bew. Brit. B. (1804) ii. p. 68, fig.; Penn. Brit. Zool. (1812) ii. p. 60, pl. 13, low. fig.; Selby, Brit. Orn. ii. p. 120; Yarr. Brit. B. 2 edit. iii. p. 25, fig.

Pl. enl. 883; Gould, B. of Eur. pl. 321, f. 2.

a. Devonshire. Male. From Col. Montagu's collection.

b. Ireland. Pale variety.

- c-e. Cambridgeshire. Very young. Presented by Mr. J. Baker.
- f. Cambridgeshire. Young. Presented by Mr. J. Baker.
- g. Sternum. England. Presented by John Ray, Esq.

# b. Pelorychus (?)

### 4. ? GALLINAGO BREHMII. Brehm's Snipe.

Scolopax Brehmii, Kaup, Isis (1823), p. 1147; Savi, Ornit. Tosc. ii. p. 315; Ann. & Mag. Nat. Hist. (1847) p. 382.

Gallinago Brehmii, Pr. Bonap. Fauna Italica, p. , t. 43; G. R. Gray, Gen. of B. iii. p. 583; Jard. Contr. Orn. (1849) p. Telmatias Brehmii, Boie, Brehm, Vög. Deuts. p. 618. Pelorychus Brehmii, Kaup, Naturl. Syst. p. 119. (Near Lockerby).

### c. Lymnocryptes.

## 5. GALLINAGO GALLINULA. The Jack Snipe.

Scolopax gallinula, Linn. S. N. i. p. 244; Temm. Man. d'Orn. 1815, p. 440; Flem. Brit. An. p. 106; Jenyns, Man. B. Vert. An. p. 206; Naum. Vög. Deuts. (1836) viii. p. 344, t. 210; Eyton, Cat. Brit. B. p. 40; Schleg. Rev. Crit. des Ois. d'Eur. p. 86; Macgill. Man. N. H. Ornith. ii. p. 104.

Gallinago minima, Leach, Syst. Cat. Mam. & B. B. M. p. 31; Steph. Gen. Zool. xii. p. 57.

Gallinago gallinula, Pr. Bonap. Geogr. Comp. List of B. p. 52; G. R. Gray, Gen. of B. iii. p. 583.

Ascalopax gallinula, Keys. & Bl. Wirbelth. Eur. p. 77. Philolimnos stagnatilis, Brehm, Vog. Deuts. p. 623.

Philolimnos minor, Brehm, Vög. Deuts. p. 624, t. 32, f. 4. Lymnocryptes gallinula, Kaup, Naturl. Syst. p. 118.

Judeock, Bew. Brit. B. (1804) ii. p. 73, fig.

Jack Snipe, Mont. Orn. Dict.; Penn. Brit. Zool, (1812) ii. p. 63, pl. 13, upp. fig.; Selby, Brit. Orn. ii. p. 125; Yarr. Brit. B. 2 edit. iii. p. 33, fig.

Pl. enl. 884; Gould, B. of Eur. pl. 322.

a. Wiltshire. Male. From Col. Montagu's collection.

b. Great Britain.

c, d. Epping. Presented by H. Doubleday, Esq.

e, f. Two Sterna. England. Presented by T. Ingall, Esq. g. Sternum. England. Presented by John Ray, Esq.

#### 3. SCOLOPAX.

Scolopax, Linn. S. N. (1756). Rusticula, Machr. Avium Gen. p. 77 (1752).

### 1. SCOLOPAX RUSTICOLA. The Woodcock.

Scolopax rusticola, Linn. S. N. i. p. 243; Temm, Man. d'Orn. 1815, p. 436; Flem. Brit. An. p. 105; Brehm, Vög. Deuts. p. 612; Jenyns, Man. B. Vert. An. p. 204; Naum. Vög. Deuts. (1836) viii. p. 361, t. 211; Eyton, Cat. Brit. B. p. 39; Pr. Bonap. Geogr. Comp. List of B. p. 53; Keys, & Bl. Wirbelth, Eur. p. 78; Schleg. Rev. Crit. des Ois. d'Eur. p. 85; G. R. Gray, Gen. of B. iii. p.

Scolopax major, Leach, Syst. Cat. Mam. & B. B. M. p. 31. Scolopax pinetorum, Brehm, Vog. Deuts. p. 613, t. 32, f. 2.

Scolopax sylvestris, Brehm, Vog. Deuts. p. 614. Rusticola vulgaris, Vieill. N. Dict. d'Hist. Nat. iii. p. 348; Savi, Ornit. Tosc. ii. p. 304.

Rusticola sylvestris, Macgill. Man. N. H. Ornith. ii. p. 105. Woodcock, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 60, fig.; Penn. Brit. Zool. (1812) ii. p. 40, pl. 10, low. fig.; Selby, Brit. Orn. ii. p. 107; Yarr. Brit. B. 2 edit. iii. p. 1, fig.

Pl. enl. 885; Gould, B. of Eur. pl. 319.

a. Devonshire. Male. From Col. Montagu's collection-

b. Devonshire. Female. From Col. Montagu's collection. c. Dorsetshire. Pale variety. From Col. Montagu's collection.

d. Farrington. Young. Presented by Sir J. Banks, Bart.

e. Trebartha, Cornwall. Small variety. Presented by Francis Rodd, Esq.

# vi. PHALAROPODINÆ.

### 1. PHALAROPUS.

Phalaropus, Briss. Ornith. vi. p. 12 (1760). Crymophilus, Vieill. Analyse, &c., p. 62 (1816). Lobipes, Cur. Règ. An. (1817) i. p. 495. Holopodius, Pr. Bonap. Syn. B. of U. S. p. (1828).Amblyrhynchus, Nutt. Man. of Ornith. p. (1834).

#### a. Phalaropus.

# 1. PHALAROPUS FULICARIUS. The Grey Phalarope.

Tringa lobata, Linn. S. N. i. p. 249.

Tringa fulicaria, Linn. S. N. i. p. 249.

Phalaropus fulicarius, Pr. Bonap. Geogr. Comp. List of B. p. 54;

G. R. Gray, Gen. of B. iii. p. 586.

Phalaropus platyrhynchos, Temm. Man. d'Orn. 1815, p. 459; Brehm, Vog. Deuts. p. 679; Naum. Vog. Deuts. (1836) viii. p. 255, t. 206.

Phalaropus rufescens, Keys. & Bl. Wirbelth. Eur. p. 73; Schleg. Rev. Crit. des Ois. d'Eur. p. 94.

Tringa glacialis, Gmel. S. N. i. p. 675.

Phalaropus glacialis, Lath. Ind. Orn. ii. p. 776.

Phalaropus rufus, Bechst. Naturg. Deuts. iv. p. 381; Brehm, Vog. Deuts. p. 678, t. 35, f. 3.

Phalaropus lobatus, Lath. Ind. Orn. ii. p. 776; Flem. Brit. An. p. 100; Jenyns, Man. B. Vert. An. p. 215; Eyton, Cat. Brit. B. p. 43; Macgill. Man. N. H. Ornith. ii. p. 82.

Phalaropus griseus, Leach, Syst. Cat. Mam. & B. B. M. p. 34.

Crymophila rufus, Vieill. N. Dict. d'Hist. Nat. viii. p. 521.

Grey Phalarope, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 140, fig.; Selby, Brit. Orn. ii. p. 162; Yarr. Brit. B. 2 edit. iii. p. 130, fig.

Gould, B. of Eur. pl. 337.

- a. Wiltshire. Winter. From Col. Montagu's collection.
- b. Devonshire. Winter. From Mr. Bartlett's collection. c. Devonshire.
- c. Devonshire. In change. From Mr. Bartlett's collection.
  d. Brighton. In change. Presented by J. E. Gray, Esq.
- e. Orkney Islands. Summer. From Mr. Gould's collection.

### b. LOBIPES.

2. PHALAROPUS HYPERBOHEUS. The Red-necked Phalarope.

Tringa hyperborea, Linn, S. N. i. p. 249.

Phalaropus hyperboreus, Lath. Ind. Orn. ii. p. 775; Temm. Man. d'Orn. 1815, p. 457; Leach, Syst. Cat. Mam. & B. B. M. p. 35; G. R. Gray, Gen. of B. iii. p. 586.

Phalaropus angustirostris, Naum. Vog. Deuts. (1836) viii. p. 240, L

205

Phalaropus cineteus, Wolf und Meyer, Taschenb. ii. p. 417; Keys. & Bl. Wirbelth. Eur. p. 73; Schleg. Rev. Crit. des Ois. d'Eur. p. 94.

Tringa fusca, Gmel. S. N. i. p. 675.

Phalaropus fuscus, Lath. Ind. Orn. ii. p. 776.

Tringa lohata, Brünn. Orn. Bor. p. 51.

Lobipes hyperboreus, Cuv. Règ. An. (1829) i. p. 532; Steph. Gen. Zool. xii. p. 169, pl. 21; Flem. Brit. An. p. 100; Brehm, Vög. Deuts. p. 676, t. 35, f. 4; Jenyns, Man. B. Vert. An. p. 214; Eyton, Cat. Brit. B. p. 43; Pr. Bonap. Geogr. Comp. List of B. p. 54; Macgill, Man. N. H. Ornith, ii. p. 84.

Phalaropus Williamsii, Simm. Linn. Trans. viii. p. 264.

Phalaropus ruficollis, Patl. Zoogr. ii. p. 203.

Phalaropus cinerascens, Pall. Zoogr. ii. p. 203.

Red Phalarope, Bew. Brit. B. (1804) ii. p. 139; Mont. Orn. Diet; Penn. Brit. Zool. (1812) ii. p. 125.

Red-necked Phalarope, Yarr. Brit. B. 2 edit. iii. p. 135, fig.

Red Lobefoot, Selby, Brit. Orn. ii. p. 166.

Pl. cnl. 766; Gould, B. of Eur. pl. 336.
a. Great Britain. Summer.

b. Orkney. Winter.

c. London Market. From Mr. J. Baker's collection.

d. London Market. Female. From Mr. J. Baker's collection.
e. London Market. Young female. From Mr. J. Baker's collec-

### FAM. IV. RALLIDÆ.

### i. RALLINÆ.

### 1. RALLUS.

Rallus, Linn. S. N. (1756). Biensis, Pucher. Rev. Zool. (1845) p. 278.

#### 1. RALLUS AQUATICUS. The Water Rail.

Rallus aquaticus, Linn. S. N. i. p. 262; Flem. Brit. An. p. 98; Brehm, Vög. Deuts. p. 691; Jenyns, Man. B. Vert. An. p. 217; Naum. Vög. Deuts. (1838) ix. p. 472, t. 235; Eyton, Cat. Brit. B. p. 45; Pr. Bonap. Geogr. Comp. List of B. p. 53; Keys. & Bl. Wirbelth. Eur. p. 68; Schleg. Rev. Crit. des Ois. d'Eur. p. 104; Macgill. Man. N. H. Ornith. ii. p. 112; G. R. Gray, Gen. of B. iii. p. 593.

Scolopax obscura, S. G. Gmel. Reis. iii. p. 92, t. 17.

Rallus sericeus, Leach, Syst. Cat. Mam. & B. B. M. p. 33.

Rallus germanicus, Brehm, Vog. Deuts. p. 690, t. 36, f. 1.

Rail or Water Rail, Mont. Orn. Dict.

Water Rail, Bew. Brit. B. (1804) ii. p. 13, fig.; Penn. Brit. Zool. (1812) ii. p. 114, pl. xx. upp. fig.; Yarr. Brit. B. 2 edit. iii. p. 110, fig.

Common Rail, Selby, Brit. Orn. ii. p. 172.

Pl. enl, 749; Gould, B. of Eur. pl. 339.

- a, b. Devonshire. Male and female. From Col. Montagu's collection.
- c. Great Britain.
- d. Cambridgeshire. From Mr. J. Baker's collection.
- e. Cambridgeshire. Male. From Mr. J. Baker's collection.
- f. Sternum. England. Presented by T. Ingall, Esq.
- g. Sternum. England. Presented by John Ray, Esq.

#### 2. ORTYGOMETRA.

Ortygometra, Linn. S. N. (1744). Crex, Bechst. Naturg. Deuts. iv. p.

Crex, Bechst. Naturg. Deuts. iv. p. (1803). Porzana, Vieill. Analyse, &c., p. 61 (1816).

Zapornia, Leach, Syst. Cat. Mam. & B. B. M. p. 34 (1816). Phalaridion, Kaup, Naturl. Syst. der Eur. Thier. p. 173 (1829).

Rallites, Pucher. Rev. Zool. (1845) p. 277.

#### a. ORTYGOMETRA.

### 1. ORTYGOMETRA CREX. The Land Rail.

Gallinula crex, Lath. Ind. Orn. ii. p. 766; Temm. Man. d'Orn. 1815. p. 444.

Rallus crex, Linn. S. N. i. p. 261.

Crex pratensis, Bechst. Naturg. Deuts. iv. p. 470; Brehm, Vog. Deuts. p. 693; Jenyns, Man. B. Vert. An. p. 217; Naum. Vog. Deuts, (1838) ix. p. 496, t. 236; Eyton, Cat. Brit. B. p. 45; Pr. Bonap. Geogr. Comp. List of B. p. 53; Keys, & Bl. Wirbelth. Eur. p. 67; Schleg. Rev. Crit. des Ois. d'Eur. p. 104; Macgill. Man. N. H. Ornith, ii. p. 113.

Ortygometra crex, Leach, Syst. Cat. Mam.& B. B. M. p. 34; Flem.

Brit. An. p. 98; G. R. Gray, Gen. of B. iii. p. 593.

Crex herbarum, Brehm, Vög. Deuts. p. 694.

Crex alticeps, Brehm, Vog. Deuts. p. 694, t. 36, f. 2.

Crake Gallinule, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 119, pl. 20. low. fig.

Mendow or Corn Crake, Selby, Brit. Orn. ii. p. 176. The Land Rail, Yarr. Brit. B. 2 edit. iii. p. 92, fig.

Pl. ent. 750; Gould, B. of Eur. pl. 341.

a. Carmarthenshire. From Col. Montagu's collection.

b, c. Cambridgeshire. Very young. Presented by Mr. J. Baker.

d. Cambridgeshire. Male. From Mr. J. Baker's collection.
c. Cambridgeshire. Female. From Mr. J. Baker's collection.

# b. PORZANA.

# 2. ORTYGOMETRA PORZANA. The Spotted Crake.

Rallus porzana, Linn. S. N. i. p. 261.

Gallinula porzana, Lath. Ind. Orn. ii. p. 772; Temm. Man. dOrn. 1815, p. 446; Flem. Brit. An. p. 99; Brehm, Vog. Deuts. p. 697.

Gallinula maculata, Brehm, Viig. Deuts. p. 698.

Gallipula punctata, Brehm, Vog. Deuts. p. 699, t. 36, f. 3. Ortygometra maruetta, Leach, Syst. Cat. Mam. & B. B. M. p. 34.

Zapornia porzana, Gould.

Crex porzana, Jenyns, Man. B. Vert. An. p. 218; Naum. Vog. Deuts. (1838) ix. p. 523, t. 237; Eyton, Cat. Brit. B. p. 46; Macgill.

Man. N. H. Ornith. ii. p. 114.

Ortygometra porzana, Steph. Gen. Zool. xii. p. ; Pr. Bonap. Geogr. Comp. List of B. p. 53; Keys. & Bl. Wirbelth. Eur. p. 67; G. R. Gray, Gen. of B. iii. p. 593.

Spotted Gallinule, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 117.

Water Crake, Bew. Brit. B. (1804) ii. p. 10, fig.

Spotted Crake, Selby, Brit. Orn. ii. p. 179; Yarr. Brit. B. 2 edit. iii. p. 97, fig.

Pl. enl. 751; Gould, B. of Eur. pl. 343.

- a. Devonshire. Male. From Col. Montagu's collection.
- b. Devonshire. Female. From Col. Montagu's collection.
- c, d. Great Britain. Presented by J. G. Children, Esq.
   e. Cambridgeshire. Male. From Mr. J. Baker's collection.
- f. Sternum. England. Presented by T. Ingall, Esq.
- g. Sternum. England. Presented by John Ray, Esq.

#### c. Phalaridion.

### 3. ORTYGOMETRA MINUTA. The Little Crake.

Rallus minutus, Pall. Iter. iii. App. p. 700.

Rallus pusillus (Pall.), Gmel. S. N. i. p. 719.

Gallinula pusilla, Bechst. Naturg. Deuts. iv. p. 484; Temm. Man. d'Orn. 1815, p. 447; Flem. Brit. An. p. 98; Brehm, Vög. Deuts. p. 699.

Rallus parvus, Scop. Ann. p. 126.

Phalaridion pusillum, Kaup, Naturl. Syst. p. 173.

Zapornia minuta, Leach, Syst. Cat. Mam. & B. B. M. p. 34.

Gallinula minuta, Mont. Orn. Dict. Suppl.; Brehm, Vög. Deuts. p. 701.

Gallinula Foljambei, Mont. Orn. Dict. App. fig.; Flem. Brit. An. p. 99.
Crex pusilla, Boie, Isis (1822), p. 561; Jenyns, Man. B. Vert. An.

Crex pusilla, Boie, Isis (1822), p. 561; Jenyns, Man. B. Vert. An. p. 219; Eyton, Cat. Brit. B. p. 46; Macgill. Man. N. H. Ornith. ii. p. 115.

Ortygometra pusilla, Pr. Bonap. Geogr. Comp. List of B. p. 53. Ortygometra minuta, Keys. & Bl. Wirbelth. Eur. p. 48; G. R. Gray, Gen. of B. iii. p. 593.

Little Gallinule, Mont. Orn. Dict. Suppl. fig.

Olivaceous Gallinule, Mont. Orn. Dict. App.

Little Crake, Selby, Brit. Orn. ii. p. 185; Yarr. Brit. B. 2 edit. iii. p. 101, fig.

Gould, B. of Eur. pl. 345.

a. Ashburton, Devonshire. From Col. Montagu's collection.

### 4. ORTYGOMETRA BAILLONI. Baillon's Crake.

Rallus Bailloni, Vieill. N. Diet. d'Hist. Nat. xxviii. p. 548; Vieill. Faun. Franc. p. 332, t. 142, f. 1, 2.

Gallinula Bailloni, Temm. Man. d'Orn. (1820) ii. p. 692; Flem. Brit. An. p. 99?

Crex pygmæa, Naum. Vög. Deuts. (1838) ix. p. 567, t. 239.

Crex Bailloni, Boie, Isis (1822), p. 561; Kaup, Ins. Thier. ii. p. 346; Jard. & Selby, Illustr. of Ornith. pl. 15; Jenyns, Man. B. Vert. An. p. 219; Macgill. Man. N. H. Ornith. ii. p. 114.

Ortygometra Bailloni, Steph. Gen. Zool. xii. p. 228, pl. 27; Pr. Bonap. Geogr. Comp. List of B. p. 53.

Ortygometra pygmæa, Keys. & Bl. Wirbelth. Eur. p. 48; G. R. Gray, Gen. of B. iii. p. 593.

Gallinula pygmæa, Brehm, Vög. Deuts. p. 701. Phalaridion pygmæa, Kaup, Naturl. Syst. p. 173. Crex Foljambei, Eyton, Cat. Brit. B. p. 46.

Zapornia Baillonii, Gould.

Baillou's Crake, Selby, Brit. Orn. ii. p. 182; Yarr. Brit. B. 2 edit. iii. p. 106, fig.

Gould, B. of Eur. pl. 344.

(Cambridgeshire, Norfolk and Derby).

# ii. GALLINULINÆ.

# 1. GALLINULA.

Gallinula, Briss. Ornith. vi. p. 2 (1760). Hydrogallina, Lacep. Mem. de l'Inst. (1800—1801). Stagnicola, Brehm, Vög. Deuts. p. 702 (1831).

# 1. GALLINULA CHLOROPUS. The Moor Hen.

Fulica chloropus, Linn. S. N. i. p. 258.
Gallinula chloropus, Lath. Ind. Orn. ii. p. 770; Temm. Man. d Orn. 1815, p. 448; Flem. Brit. An. p. 99; Jenyns, Man. B. Vert. An. p. 220; Naum. Vög. Deuts. (1838) ix. p. 587, t. 240; Eyton, Cat. Brit. B. p. 46; Pr. Bonap. Geogr. Comp. List of B. p. 53; Keys & Bl. Wirbelth. Eur. p. 68; Schleg. Rev. Crit. des Ois. d'Eur. p. 103; Macgill. Man. N. H. Ornith. ii. p. 117; G. R. Gray, Gen. of B. iii. p. 599.

Stagnicola septentrionalis, Brehm, Vög. Deuts. p. 704. Stagnicola chloropus, Brehm, Vög. Deuts. p. 706, t. 36, f. 4. Rallus chloropus, Savi, Ornit. Tosc. ii. p. 382.

Fulica fusca, Gmel. S. N. i. p. 697.

Gallinula fusca, Lath. Ind. Orn. ii. p. 771.

Fulica maculata, Gmel. S. N. i. p. 701.

Fulica flavipes, Gmel. S. N. i. p. 702.

Fulica fistulans, Gmel. S. N. i. p. 702.

Common Gallinule, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 121, pl. 22, upp. fig.; Selby, Brit. Orn. ii. p. 188.

Water Hen, Bew. Brit. B. (1804) ii. p. 128, fig. Moor-hen, Yarr. Brit. B. 2 edit. iii. p. 114, fig.

Pl. enl. 877; Gould, B. of Eur. pl. 342.

a. Great Britain. Male.

b. Great Britain. Female.

c. Brome, Suffolk. Presented by the Rev. H. Kirby.

d, e. Cambridgeshire. Presented by Mr. J. Baker.

f—i. Cambridgeshire. Very young. Presented by Mr. J. Baker.
j. Sternum. England. Presented by John Ray, Esq.

#### 2. PORPHYRIO.

Porphyrio, Briss. Ornith. v. p. 522 (1760).

1. Porphyrio martinica. The Martinico Gallinule.

Porphyrio hyacinthinus (Temm.), Thompson, Ann. & Mag. Nat. Hist. (1846) p. 311.

Fulica martinica, Linn. S. N. i. p. 259.

Gallinula martinica, Lath. Ind. Orn. ii. p. 769; Thompson, MSS. Porphyrio martinica, Temm.

(Ireland).

#### 3. FULICA.

Fulica, Linn. S. N. (1735).

### 1. Fulica atra. The Common Coot.

Fulica atra, Linn. S. N. i. p. 257; Flem. Brit. An. p. 100; Brehm, Vög. Deuts. p. 709; Jenyns, Man. B. Vert. An. p. 221; Eyton, Cat. Brit. B. p. 46; Pr. Bonap. Geogr. Comp. List of B. p. 53; Keys. & Bl. Wirbelth. Eur. p. 68; Naum. Vög. Deuts. (1838) ix. p. 635, t. 241; Schleg. Rev. Crit. des Ois. d'Eur. p. 102; Macgill. Man, N. H. Ornith. ii. p. 118; G. R. Gray, Gen. of B. iii. p. 600.

Fulica aterrima, Retz. Faun. Suec. p. 199; Brehm, Vög. Deuts. p. 710, t. 36, f. 4.

Fulica leucoryx, Gmel. S. N. i. p. 703; Sparrm. Mus. Carls. t. 12. Fulica æthiops, Gmel. S. N. i. p. 704; Sparrm. Mus. Carls. t. 13. Fulica platyuros, Brehm, Vög. Deuts. p. 711.

Coot, Bew. Brit. B. (1804) ii. p. 133, fig.

Greater Coot, Mont. Orn. Dict.

Common Coot, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 127, pl. 22; Selby, Brit. Orn. ii. p. 193; Yarr. Brit. B. 2 edit. iii. p. 123, fig.

Pl. enl. 197; Gould, B. of Eur. pl. 338.

a. Devonshire. From Col. Montagu's collection.

b. Cambridgeshire. From Mr. J. Baker's collection.

# ORDER VIII. ANSERES.

Anseres, Linn. (1735); Cuv. (1795-1796).

Hydrophilæ, pt.—Odontorhynchæ—Platyrhynchæ— Stenorhynchæ Urinatrices, pt., Mæhr. (1752).

Nudipedes, pt. — Palmipedes tridactyles — P. tetradactyles, Schaff. (1774).

Retipedes, pt.—Plonguers—Palmipedes, pt., Scop. (1777).

Palmipedes, Lath. (1790).

Anseres — Brachypteres — Serrirostres — Macropteres — Pinnipedes, Cuv. (1799—1800).

Grallatores — Alectorides — Lobipedes, pt. — Hygrobatæ, pt., Illig. (1811).

Natatorés—Longipennes—Tubinares—Lamellisodentati—Steganopodes—Pygopodes—Impennes, *Illig.* (1811).

Palmipedes-Grallatores, pt.-Pinnatipedes, pt., Temm. (1815).

Grallatores—Uncirostres—Palmipedes, Vieill. (1816).

Natatores—N. Teleopodes—Syndactyli—Urinatores—Dermorhynci—Pelagii—N. Atelopodes—Siphorini—Brachypteri—N. Ptilopteri—Sphenisci, Vieill. (1816).

Palmipedes—Plonguers ou Brachypteres—Longipennes ou Grands voiliers—Totipalmes—Lamellirostres, Cuv. (1817).

Natatores — Pelagii — Igrobata, pt. — Siforinii — Dermorinchi — Steganopodi — Marangoni — Ditichi — Sfenisci, Ranz. (1823).

Grallatores, pt.—Natatores, Vigors (1826). Grallæ—Pyxidirostres, Pr. Bonap. (1831).

Anseres — Longipennis — Lamellisodentata — Steganopodes — Pygopodes — Impennis, Pr. Bonap. (1831).

Grallatores, pt.—Natatores, Keys. & Bl. (1840).

Cribratrices—Urinatrices—Mersatrices, Macgill. (1840).

### FAM. I. ANATIDÆ.

### i. Plectropterinæ.

#### 1. PLECTROPTERUS.

Plectropterus, Leach, Steph. Gen. Zool. xii. pt. ii. p. 6 (1824).

1. Plectropterus gambensis. The Spur-winged Goose.

Anas gambensis, Linn. S. N. i. p. 195.

Anser gambensis, Jenyns, Man. B. Vert. An. p. 226; Flem. Brit. An. p. 128.

Plectropterus gambensis, Steph. Gen. Zool. xii. p. 7, pl. 36; Keys. & Bl. Wirbelth. Eur. p. 84; G. R. Gray, Gen. of B. iii. p. 604. Anser spinosus, Bonn. Encyc. Meth. p. 118.

Spur-winged Goose, Lath. Gen. Syn. vi. p. 452, pl. 102; Yarr. Brit. B. 2 edit. iii. p. 177, fig.

(Cornwall).

### ii. Anserinæ.

### 1. CHENALOPEX.

Chenalopex, Steph. Gen. Zool. xii. pt. ii. p. 41 (1824). Tadorna, Boie, Isis (1826), p. 981.

# CHENALOPEX EGYPTIACA. The Egyptian Goose.

Anas ægyptiaca, Linn. S. N. i. p. 197.

Anser ægyptiacus, Jenyns, Man. B. Vert. An. p. 225; Schleg. Rev. Crit. des Ois. dEur p. 111.

Tadorna ægyptiaca, Boie, Isis (1826), p. 981.

Chenalopex ægyptiaca, Steph. Gen. Zool. xii. p. 43, pl. 42; Pr. Bonap. Geogr. Comp. List of B. p. 56; Keys. & Bl. Wirbelth. Eur. p. 84; Schleg. Rev. Crit. des Ois. d'Eur. p. 111; Macgill. Man. N. H. Ornith. ii. p. 153; G. R. Gray, Gen. of B. iii. p. 605.

Bernicla ægyptiacus, Eyton, Cat. Brit. B. p. 65.

Anas varia, Bechst. Ornith. Taschenb. ii. p. 454.
Anser varius, Meyer, Taschenb. Deuts. Vög. ii. p. 562.
Egyptian Goose, Bew. Brit. B. (1804) ii. p. 287; Yarr. Brit. B.
2 edit. iii. p. 173, fig.
Pl. enl. 379: Gould B. of Eur. pl. 353

Pl. enl. 379; Gould, B. of Eur. pl. 353. (Tweed, at Carham).

#### 2. BERNICLA.

Bernicla, Steph. Gen. Zool. xii. p. 45 (1824). Chloephaga, Eyton, Monogr. Anat. (1838).

### a. BERNICLA.

### 1. Bernicla Leucopsis. The Bernicle Goose.

Anas erythropus, Linn. S. N. i. p. 197.

Anas leucopsis, Temm. Man. d'Orn. 1815, p. 531.

Anser leucopsis, Bechst. Naturg. Deuts. iv. p. 921; Jenyns, Man. B. Vert. Anim. p. 224; Keys. & Bl. Wirbelth. Eur. p. 83; Naum. Vög. Deuts. (1842) xi. p. 378, t. 291; Schleg. Rev. Crit. des Ois, d'Eur. p. 109.

Bernicla leucopsis, Boie, Isis (1822), p. 563; Kaup, Naturl. Syst. p. 25; Brehm, Vög. Deuts. p. 847; Eyton, Cat. Brit. B. p. 62; Pr. Bonap. Geogr. Comp. List of B. p. 55; Macgill. Man. N. H. Ornith. ii. p. 150; G. R. Gray, Gen. of B. iii. p. 607.

Anser Bernicla, Leach, Syst. Cat. Mam. & B. B. M. p. 37; Flem. Brit. An. p. 127; Pall. Zoogr. ii. p. 230.

Bernicla erythropus, Steph. Gen. Zool. xii. p. 49.

Bernicla, Bew. Brit. B. (1804) ii. p. 307, fig.

Bernicle Goose, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 237; Yarr. Brit. B. 2 edit. iii. p. 161, fig.

Bernicle Goose or Clakis, Selby, Brit. Orn. ii. p. 268.

Pl. enl. 855; Gould, B. of Eur. pl. 250.

a. Devonshire. From Col. Montagu's collection.

b. - Young. From Mr. Bartlett's collection.

c. Cumberland. Male. From Mr. J. Baker's collection.
d. Cumberland. Female. From Mr. J. Baker's collection.

e. Sternum. England. Presented by John Ray, Esq.

### 2. Bernicla Brenta. The Brent Goose.

Bernicla torquata, Boie, Isis (1822), p. 363; Brehm, Vög. Deuts. p. 851.

Anas bernicla, Linn. S. N. i. p. 198; Temm. Man. d'Orn. 1815,

p. 531.

Anser torquatus, Frisch, Vög. Deuts. ii. p. 156; Nils. Orn. Suec. p. 117; Naum. Vög. Deuts. (1842) xi. p. 391, t. 292; Jenyns, Man. B. Vert. An. p. 224.

Bernicla breuta, Steph. Gen. Zool. xii. p. 46; Eyton, Cat. Brit. B. p. 62; Pr. Bonap. Geogr. Comp. List of B. p. 56; G. R. Gray,

Gen. of B. iii, p. 607.

Anser brents, Leach, Syst. Cat. Mam. & B. B. M. p. 37; Flem. Brit. An. p. 127; Pall. Zoogr. ii. p. 229; Keys. & Bl. Wirbelth. Eur. p. 83.

Anser bernicla, Illiger, Prod. p. 277; Schleg. Rev. Crit. des Ois.

d'Eur. p. 110.

Bernicla glaucogaster, Brehm, Vög. Deuts. p. 849.

Bernicla micropus, Brehm, Vög. Deuts. p. 849.

Bernicla platyuros, Brehm, Vag. Deuts. p. 850, t. 41, f. 3.

Berniela collaris, Brehm, Vog. Deuts. p. 851.

Berniela melanopsis, Macgill. Man. N. H. Ornith. ii. p. 151.

Brent Goose, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 311, fig.; Penn. Brit. Zool. (1812) ii. p. 239; Selby, Brit. Orn. ii. p. 271; Yarr. Brit. B. 2 edit. iii. p. 164, fig.

Pl. enl. 342; Gould, B. of Eur. pl. 352.

a, b. Devonshire. From Col. Montagu's collection. c-e. Three Tracheæ (imperfect). England. f. Sternum. England.

### 3. Bernicla Ruficollis. The Red-breasted Goose.

Anas ruficollis, Gmel. S. N. i. p. 511; Temm. Man. d'Orn. 1815, p. 533.

Anas torquata, Gmel. Iter. i. p. 181, t. 14.

Anser ruficollis, Pall. Spic. iv. p. 12, t. 4; Flem. Brit. An. p. 128; Jenyns, Man. B. Vert. An. p. 225; Keys. & Bl. Wirbelth. Eur. p. 83; Naum. Vög. Deuts. (1842) xi. p. 408, t. 293; Schleg. Rev. Crit. des Ois. d'Eur. p. 111; Macgill. Man. N. H. Ornith, ii. p. 152.

Bernicla ruficollis, Boie, Isis (1822), p. 563; Steph. Gen. Zool. xii. p. 53, pl. 43; Brehm, Vög. Deuts. p. 852; Pr. Bonap. Geogr. Comp. List of B. p. 56; Eyton, Cat. Brit. B. p. 62; Macgill. Man. N. H. Oruith. ii, p. 152; G. R. Gray, Gen. of B. iii. p. 607.

Red-breasted Goose, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 289, fig.; Penn. Brit. Zool. (1812) ii. p. 241; Selby, Brit. Orn. ii. p. 275; Yarr. Brit. B. 2 edit. iii. p. 171, fig. Pall. Spic. vi. t. 4; Gould, B. of Eur. pl. 351.

a. Berwick. From Mr. Bullock's collection.

#### 4. Bernicla canadensis. The Canada Goose.

Anas canadensis, Linn. S. N. i. p. 198.

Cygnus canadensis, Steph. Gen. Zool. xii. p. 19; Eyton, Cat. Brit. B. p. 65; Jenyns, Man. B. Vert. An. p. 227.

Anser canadensis, Flem. Brit. An. p. 128; Keys. & Bl. Wirbelth. Eur. p. 82.

Bernicla canadensis, G. R. Gray, Gen. of B. iii. p. 608.

Cygnopsis canadensis, Brandt.

Canada Goose, Bew. Brit. B. (1804) ii. p. 283; Yarr. Brit. B. 2 edit. iii. p. 181, fig.

Pl. enl. 346; Edwards, Birds, pl. 151.

a, b. Cumberland. From Mr. J. Baker's collection.

### 3. ANSER.

Anser, Briss. Orn. vi. p. 262 (1760). Cygnus, p. Linn. S. N. (1735). Cygnopsis, Brandt (1836).

### a. Anser.

# 1. Anser ferus. The Grey lag Goose.

Anas Anser (ferus), Gmel. S. N. i. p. 510; Temm. Man. d'Orn. 1815, p. 526.

Anser ferus, Steph. Gen. Zool. xii. p. 28, pl. 41; Jenyns, Man. B. Vert. An. p. 222; G. R. Gray, Gen. of B. iii. p. 607.

Anser palustris, Flem. Brit. An. p. 126; Eyton, Cat. Brit. B. p. 62;

Macgill, Man. N. H. Ornith. ii. p. 147.

Anser cinereus, Meyer, Taschenb. Deuts. ii. p. 552; Boie, Isis (1822), p. 563; Brehm, Vog. Deuts. p. 835; Pr. Bonap. Geogr. Comp. List of B. p. 55; Keys. & Bl. Wirbelth. Eur. p. 83; Naum. Vog. Deuts. (1843) xi. p. 229, t. 285.

Anser sylvestris, Brehm, Vog. Deuts. p. 836.

Anser vulgaris, Pall. Zoogr, ii. p. 222.

Grey Lag Goose, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 292, fig.; Penn. Brit. Zool. (1812) ii. p. 228; Selby, Brit. Orn. ii. p. 261; Yarr. Brit. B. 2 edit, iii. p. 140, fig. Gould, B. of Eur. pl. 347.

a. Great Britain.

### 2. Anser segetum. The Bean Goose.

Anas segetum, Gmel. S. N. i. p. 512; Temm. Man. d'Orn. 1815, p.

Anser segetum, Meyer, Taschenb. Deuts. ii. p. 554; Leach, Syst. Cat. Mam. & B. B. M. p. 36; Boie, Isis (1822), p. 364; Steph. Gen. Zool. xii. p. 26; Brehm, Vög. Deuts. p. 838; Pr. Bonap. Geogr. Comp. List of B. p. 55; Eyton, Cat. Brit. B. p. 61; Jenyns, Man. B. Vert. An. p. 222; Keys. & Bl. Wirbelh, Eur. p. 83; Schleg. Rev. Crit. des Ois. d'Eur. p. 109; Macgill. Man. N. H. Ornith. ii. p. 147; G. R. Gray, Gen. of B. iii. p. 607.

Anser ferus, Flem. Brit. An. p. 126.

Anser arvensis, Brehm, Vög. Deuts. p. 839; Naum. Vög. Deuts. (1842) xi. p. 277, t. 286.

Anser rufescens, Brehm, Vög. Deuts. p. 838. Anser platyuros, Brehm, Vög. Deuts. p. 837.

Bean Goose, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 306; Penn. Brit. Zool. (1812) ii. p. 233, pl. 39; Selby, Brit. Orn. ii. p. 263; Yarr. Brit. B. 2 edit. iii. p. 148, fig.

Pl. enl. 985; Gould, B. of Eur. pl. 348.

a, b. Great Britain.

c. Great Britain. Young. From Mr. Bartlett's collection.
d. Great Britain. Male. From Mr. J. Baker's collection.
e. f. Two trachew. England.

# 3. Anser Brachyrhynchus. The Pink-footed Goose.

Anser brachyrhnchus, Baill. Mém. de la Soc. d'emul. d'Abbev. 1833, p. ; Temm. Man. d'Orn. iv. p. 520; Schleg. Rev. Crit. des Ois. d'Eur. p. 110; Macgill. Man. N. H. Ornith. ii. p. 148; G. R. Gray, Gen. of B. iii. p. 607.

Anser phænicopus, Bartl. Proc. Z. S. 1839, p. 3. Anser segetum, Naum. Vög. Deuts. (1842) xi. t. 287. Pink-footed Goose, Yarr. Brit. B. 2 edit. iii. p. 153, fig.

- a. Great Britain.
- b. Leadenhall Market. Male. From Mr. J. Baker's collection.
- c. Leadenhall Market. Female. From Mr. J. Baker's collection.
- d. Sternum. England. Presented by John Ray, Esq.

### 4. Anser ERYTHROPUS. The White-fronted Goose.

Anas albifrons, Linn. S. N. i. p. 509; Temm. Man. d'Orn. 1815, p. 529.

Anas erythropus, Linn. Faun. Suec. No. 116.

Anser albifrons, Bechst. Naturg. Deuts. iv. p. 898; Leach, Syst. Cat.

Mam. & B. B. M. p. 36; Boie, Isis (1822), p. 563; Steph. Gen.

Zool. xii. p. 25; Brehm, Vög. Deuts. p. 843; Pr. Bonap. Geogr.

Comp. List of B. p. 55; Jenyns, Man. B. Vert. An. p. 222;

Keys. & Bl. Wirbelth. Eur. p. 83; Naum. Vög. Deuts. (1842)

xi. p. 352, t. 289; Schleg. Rev. Crit. des Ois. d'Eur. p. 110;

Macgill. Man. N. H. Ornith. ii. p. 149.

Anser erythropus, Flem. Brit. An. p. 127; Eyton, Cat. Brit. B. p.

62; G. R. Gray, Gen. of B. iii, p. 607.

White-fronted Goose, Mont. Orn. Dict; Penn. Brit. Zool. (1812) ii. p. 235; Yarr. Brit. B. 2 edit. iii. p. 157.

White-fronted Wild Goose, Bew. Brit. B. (1804) ii. p. 305; Selby, Brit. Orn. ii. p. 266.

Gould, B. of Eur. pl. 289.

- a. Wiltshire. From Col. Montagu's collection.
- b. Wales. From Col. Montagu's collection.
- c. Great Britain.
- d. Trachea. England.
- e. Sternum. England. Presented by John Ray, Esq.

# b. Cygnopsis.

### 5. Anser cygnoides. The Chinese Goose.

Anas cygnoïdes, Linn. S. N. i. p. 194.

Cygnus guineensis, Eyton, Cat. Brit. B. p. 65; Jenyns, Man. B. Vert. An. p. 226.

Cygnus sinensis, Steph. Gen. Zool. xii. p. 22, pl. 40.

Anser hispanicus, Flem. Brit. An. p. 128.

Anser cygnoides, Pall. Zoogr. ii. p. 218; Keys. & Bl. Wirbelth. Eur. p. 82; G. R. Gray, Gen. of B. iii. p. 607.

Cygnopsis cygnoides, Brandt.

Swan Goose, Bew. Brit. B. (1804) ii. p. 281. Chinese Goose, Lath. Gen. Syn. vi. p. 447.

a. Liphook, Hants. Presented by Thomas Butler, Esq.

# iii. CYGNINÆ.

### 1. CYGNUS.

Cygnus, Linn. S. N. (1735). Olor, Wagl. Isis (1832), p. 1234. Chenopis, Wagl. Isis (1832), p. 1234.

#### a. OLOR.

### 1. CYGNUS FERUS. The Whistling Swan.

Anas cygnus, Linn. S. N. i. p. 194; Temm. Man. d'Orn. 1815, ii. p. 522.

Cygnus ferus, Leach, Syst. Cat. Mum. & B. B. M. p. 37; Steph. Gen. Zool. xii. p. 10, pl. 37; Flem. Brit. An. p. 126; Eyton, Cat. Brit. B. p. 62; Jenyns, Man. B. Vert. An. p. 227; G. R.

Gray, Gen. of B. iii. p. 610.

Cygnus musicus, Bechst. Naturg. Deuts. iv. p. 830; Boie, Isis (1822), p. 563; Brehm, Vög. Deuts. p. 831; Pr. Bonap. Geogr. Comp. List of B. p. 55; Keys. & Bl. Wirbelth. Eur. p. 82; Schleg. Rev. Crit. des Ois. d'Eur. p. 112; Macgill. Man. N. H. Ornith. ii. p. 158.

Cygnus melanorhynchus, Wolf und Meyer, Taschenb. ii. p. 498.

Olor musicus, Wagl. Isis (1832), p. 1234.

Cygnus olor, Pall. Zoogr. ii. p. 211.

Cygnus xanthorhinus, Naum. Vog. Deuts. (1842) xi. p. 478, t. 296.

Whistling Swan or Wild Swan, Mont. Orn. Dict.

Wild Swan, Bew. Brit. B. (1804) ii. p. 272; Penn. Brit. Zool. (1812) ii. p. 218.

Whistling Swan, Selby, Brit. Orn. ii. p. 278.

The Hooper, Elk, or Whistling Swan, Yarr. Brit. B. 2 edit. iii, p. 187, fig.

Gould, B. of Eur. pl. 355.

a. Wiltshire. From Col. Montagu's collection.

b. Hayling's Island. Presented by J. B. Tyndale, Esq.

c. Great Britain. Young. From Mr. Leadbeater's collection.

#### 2. CYGNUS AMERICANUS. The American Swan.

Cygnus americanus, Sharpless, Amer. Journ. Sci. & Arts, xxii. p.; Audub. B. of Amer. pl.; Macgill. Man. N. H. Ornith. ii. p. 157.

(Edinburgh).

### b. CYGNUS.

#### 3. Cygnus olor. The Mute Swan.

Anas olor, Gmel. S. N. i. p. 501; Temm. Man. d'Orn. 1815, p. 523.

Cygnus gibbus, Bechst. Naturg. Deuts. iv. p. 815; Brehm, Vög.

Deuts. p. 829.

Cygnus olor, Boie, Isis (1822), p. 563; Steph. Gen. Zool. xii. p. 15, pl. 38; Jenyns, Man. B. Vert. An. p. 228; Pr. Bonap. Geogr. Comp. List of B. p. 55; Keys. & Bl. Wirbelth. Eur. p. 82; Schleg. Rev. Crit. des Ois. d'Eur. p. 110; Naum. Vög. Deuts. (1842) xi. p. 442, t. 295; G. R. Gray, Gen. of B. iii. p. 610.

Cygnus mansuetus, Flem. Brit. An. p. 126.

Cygnus sibilus, Pall. Zoogr. ii. p. 215.

Mute Swan, Bew. Brit. B. (1804) ii. p. 277, fig.; Yarr. Brit. B. 2 edit. iii. p. 205, fig.

Tame Swan, Penn. Brit. Zool. (1812) ii. p. 221.

Pl. enl. 913; Gould, B. of Eur. pl. 354.

- a. Great Britain.
- b. Great Britain. Presented by Dr. Dowler.
- c. Skeleton. England.

### ?4. CYGNUS IMMUTABILIS. The Changeless Swan.

Cygnus immutabilis, Yarr. Proc. Z. S. 1838, p. 19; Pr. Bonap. Geogr. Comp. List of B. p. 55; Macgill. Man. N. H. Ornith. ii. p. 156; G. R. Gray, Gen. of B. iii. p. 610.
Cygnus olor immutabilis, Schleg. Rev. Crit. des Ois. d'Eur. p. 112.
Polish Swan, Yarr. Brit. B. 2 edit. iii. p. 225, fig.
(East Coast of England).

### 5. Cygnus MINOR. Bewick's Swan.

Cygnus islandicus, Brehm, Vög. Deuts. p. 832, t. 41, f. 1.

Cygnus minor, Keys. & Bl. Wirbelth. Eur. p. 82; G. R. Gray, Gen.

of B. iii. p. 610.

Cygnus musicus minor, Schleg. Rev. Crit. des Ois. d'Eur. p. 112. Cygnus melanorhinus, Naum. Vog. Deuts. (1842) xi. p. 497, t. 297. Cygnus Bewickii, Yarr. Linn. Trans. 1830, p. 445; Eyton, Hist. R. Brit. B. p. 86, fig.; Eyton, Cat. Brit. B. p. 63; Pr. Bonap. Geogr. Comp. List of B. p. 55; Jenyns, Man. B. Vert. An. p. 228; Macgill. Man. N. H. Ornith. ii. p. 159.

Cygnus musicus, Faber, Prodr. p. 81.

Cygnus olor, B. minor, Pall. Zoogr. ii. p. 214.

New species of Swan, Wing. Trans. Nat. Hist. Soc. North. i. p. 1. Bewick's Swan, Jard. & Selby, Illustr. Ornith. pl. 95; Selby, Brit. Orn. ii. p. 284; Yarr. Brit. B. 2 edit. iii. p. 194, fig.

Gould, B. of Eur. pl. 356.

a. Great Britain. Presented by W. Yarrell, Esq. b. Great Britain. From Mr. Bartlett's collection.

c. Skeleton. England.

# iv. ANATINÆ.

# 1. TADORNA.

Tadorna, Flem. Phil. of Zool. ii. p. 260 (1822). Vulpanser, Keys. & Bl. Wirbelth, Eur. p. 84 (1840).

# 1. TADORNA VULPANSER. The Common Shieldrake.

Anas tadorna, Linn. S. N. i. p. 195; Temm. Man. d'Orn. 1815, p. 536; Lea h, Syst. Cat. Mam. & B. B. M. p. 38; Naum. Vog. Deuts. (1842) xi. p. 534, t. 298; Schleg. Rev. Crit. des Ois. d' Eur.

Ana; cornuta, S. G. Gmel. Reis. ii. p. 185, t. 19. Tadorna familiaris, Boie, Isis (1822) p. 563.

Tadorna Bellonii, Steph. Gen. Zool. xii. p. 72, pl. 45; Jenyns, Man. B. Vert. An. p. 229; Eyton, Cat. Brit. B. p. 61.

Tadorna vulpanser, Flem. Brit. An. p. 122; Pr. Bonap. Geogr. Comp. List of B. p. 56; Macgill. Man. N. H. Ornith. ii. p. 162; G. R. Gray, Gen. of B. iii. p. 613.

Vulpanser tadorna, Keys. & Bl. Wirbelth. Eur. p. 84. Tadorna gibbera, Brehm, Vog. Deuts. p. 856, t. 42, f. 1. Tadorna littoralis, Brehm, Vog. Deuts. p. 857.

Tadorna maritima, Brehm, Vog. Deuts. p. 858.

Shieldrake, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 341, fig.; Penn. Brit. Zool. (1812) ii. p. 256.

Common Shieldrake, Selby, Brit. Orn. ii. p. 289.

Common Shelldrake, Yarr. Brit. B. 2 edit. iii. p. 235, fig.

Pl. enl. 53; Gould, B. of Eur. pl. 357.

a. Scotland. From Col. Montagu's collection.

b. Great Britain.

c. Hayling's Island. Presented by J. W. Tyndale, Esq.

e. Great Britain. Presented by J. Gould, Esq. f, g. Kirkwall. Very young. From Mr. J. Baker's collection.

h-k. Four fachese. England.

l. Sternum. England. Presented by John Ray, Esq.

#### 2. CASARKA.

Casarka, Pr. Bonap. Geogr. Comp. List of B. p. 56 (1838).

### 1. CASARKA RUTILA. The Ruddy Shieldrake.

Anas rutila, Pall. Nov. Comm. Petrop. xiv. p. 579, t. 22, f. 1; Naum. Vög. Deuts. (1842) xi. p. 564, t. 299; Schleg. Rev. Crit. des Ois. d'Eur. p. 116.

Anas casarca, Linn. S. N. App. iii. p. 224.

Tadorna rutila, Boie, Isis (1822), p. 563; Steph. Gen. Zool. xii. p. 71; Brehm, Vög. Deuts. p. 859; Jenyns, Man. B. Vert. An. p.

229; Eyton, Cat. Brit. B. p. 61. Vulpanser rutila, Keys. & Bl. Wirbelth. Eur. p. 84.

Tadorna casarca, Macgill. Man. N. H. Ornith. ii. p. 163.

Casarca rutila, Pr. Bonap. Geogr. Comp. List. of B. p. 56; G. R. Gray, Gen. of B. iii. p. 613.

Ferrugineous Duck, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 359.

Red Duck, Penn. Brit. Zool. (1812) ii. p. 272 ?

Ruddy or Casarka Shieldrake, Selby, Brit. Orn. ii. p. 293.

Ruddy Shieldrake, Yarr. Brit. B. 2 edit. iii. p. 230, fig.

Gould, B. of Eur. pl. 358.

(Dorsetshire and Suffolk).

#### 3. MARECA.

Mareca, Steph. Gen. Zool. xii. p. 130 (1824), Penelope, Kaup, Naturl. Syst. der Eur. Thier. p. 31 (1829).

# 1. MARECA PENELOPE. The Wigeon.

Anas penelope, Linn. S. N. i. p. 202; Temm. Man. d'Orn. 1815, p. 542; Leach, Syst. Cat. Mam. § B. B. M. p. 37; Boie, Isis (1822), p. 564; Flem. Brit. An. p. 124; Brehm, Vög. Deuts. p. 874; Keys. § Bl. Wirbelth. Eur. p. 84; Naum. Vög. Deuts. (1842) xi. p. 724, t. 305; Schleg. Rev. Crit. des Qis. d'Eur. p. 114.

Mareca fistularis, Steph. Gen. Zool. xii, p. 131, pl. 50.

Mareca penelope, Seiby, Brit. Orn. ii. p. 324; Jenyns, Man. B. Vert. An. p. 236; Eyton, Cat. Brit. B. p. 59; Pr. Bonap. Geogr. Comp. List of B. p. 65; Macgill. Man. N. H. Ornith. ii. p. 174; G. R. Gray, Gen. of B. iii. p. 613.

Anas Kagolka, Gmel. S. N. i. p. 527; Brehm, Vog. Deuts. p. 872.

Anas fistularis, Brehm, Vog. Deuts. p. 874.

Wigeon, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 352, fig.; Penn. Brit. Zool. (1812) ii. p. 273; Yarr. Brit. B. 2 edit. iii. p. 286, fig.

Common Wigeon, Selby, Brit. Orn. ii. p. 324.

Pl. enl. 825; Gould, B. of Eur. pl. 359.

a-c. Devonshire. From Col. Montagu's collection.

d. Trachea. England.

c. Trachea Eogland. Presented by T. Ingall, Esq. f. Sternum. England. Presented by T. Ingall, Esq.

g. Sternum. England.

# 2. MARECA AMERICANA. The American Wigeon.

Anas americana, Gmel. S. N. i. p. 526; Wils. Amer. Orn. pl. 69, f.

4; Schleg. Rev. Crit. des Ois. d'Eur. p. 114.

Mareca americana, Steph. Gen. Zool. xii. p. 135; Thompson, Ann. & Mag. Nat. Hist. 1845, p. 310; G. R. Gray, Gen. of B. iii. p. 613.

American Wigeon, Yarr. Brit. B. 2 edit. iii. p. 292, fig.

Pl. enl. 955.

(London Market).

#### 4. DAFILA.

Dafila, Leach, Steph. Gen. Zool. xii. p. 126 (1824). Trachelonetta, Kaup, Naturl. Syst. der Eur. Thier. p. 115 (1829). Phasianurus, Wagl. Isis (1832), p. 1235. Pecilonetta, Eyton, Monogr. of Anat. p. (1838).

#### 1. DAFILA ACUTA. The Pin-tailed Duck.

Anas acuta, Linn. S. N. i. p. 202; Temm. Man. d'Orn. 1815, p. 540; Boie, Isis (1822), p. 564; Flem. Brit. An. p. 124; Brehm, Vog. Deuts. p. 866; Jenyns, Man. B. Vert. An. p. 232; Keys. & Bl. Wirbelth. Eur. p. 85; Naum. Vög. Deuts. (1842) xi. p. 638, t. 301; Schleg. Rev. Crit. des Ois. d'Eur. p. 115. Dafila caudacuta, Steph. Gen. Zool. xii. p. 127, pl. 49. Dafila acuta, Eyton, Cat. Brit. B. p. 60; Pr. Bonap. Geogr. Comp. List of B. p. 56; G. R. Gray, Gen. of B. iii. p. 615. Anas caudacuta, Leach, Syst. Cat. Mam. & B. B. M. p. 38; Pall. Zoogr. ii. p. 280. Anas longicauda (Briss.), Brehm, Vog. Deuts. p. 868. Trachelonetta acuta, Kaup, Naturl. Syst. p. 115. Anas caudata, Brehm, Vog. Deuts. p. 869. Querquedula caudacuta, Macgill. Man. N. H. Ornith. ii. p. 170. Querquedula acuta, Selby, Brit. Orn. ii. p. 311. Phasianurus acutus, Wagl. Isis (1832), p. 1235. Pintail Duck, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 360, fig.; Penn. Brit. Zool. (1812) ii. p. 266; Yarr. Brit. B. 2 edit. iii. p. 253, fig. Common Pintail, Selby, Brit. Orn. ii. p. 311.

Pl. enl. 954; Gould, B. of Eur. pl. 365.

- a. Devonshire. Male. From Col. Montagu's collection.
- b. Kent. Male.
- c. Surrey. Female.
- d. —
- e. Trachea. England. f. Sternum. England. Presented by T. Ingall, Esq.
- g. Sternum. England. Presented by John Ray, Esq.

#### 5. ANAS.

Anas, Linn. S. N. (1735). Boschas, Swains. (1831).

### 1. Anas Boschas. The Wild Duck.

Anas boschas, Linn. S. N. i. p. 205; Temm. Man. d'Orn. 1815, p. 537; Boie, Isis (1822), p. 564; Steph. Gen. Zool. xii. p. 84; Flem. Brit. An. p. 123; Brehm, Vog. Deuts. p. 862; Jenyns, Man. B. Vert. An. p. 233; Pr. Bonap. Geogr. Comp. List of B. p. 56; Eyton, Cat. Brit. B. p. 61; Keys. & Bl. Wirbelth. Eur. p. 85; Naum. Vög. Deuts. (1842), xi. p. 575, t. 300; Schleg. Rev. Crit. des Ois. d'Eur. p. 113; Macgill. Man. N. H. Ornith, ii. p. 165; G. R. Gray, Gen. of B. iii. p. 615.

Anas fera, Leach, Syst. Cat. Mam. & B. B. M. p. 39.

Anas adunca, Linn. S. N. i. p. 206; Jenyns, Man. B. Vert. An. p. 234; Don. Brit. Birds, ix. pl. 218.

Anas archiboschas, Brehm, Vog. Deuts. p. 862, t. 42, f. 2.

Anas subboschas, Brehm, Vog. Deuts. p. 864. Anas conboschas, Brehm, Vog. Deuts. p. 865.

Common or Wild Duck, Mont. Orn. Dict.; Selby, Brit. Orn. ii. p. 305,

Mallard, Bew. Brit. B. (1804) ii. p. 327, fig.; Penn. Brit. Zool. (1812) ii. p. 258, pl. 43.

Wild Duck, Yarr. Brit. B. 2 edit. iii. p. 264, fig.

Pl. enl. 776, 777; Gould, B. of Eur. pl. 361.

a, b. Devonshire. From Col. Montagu's collection.

c. Surrey.

d. Cambridgeshire. Male. From Mr. J. Baker's collection.

e. Kirkwall. From Mr. J. Baker's collection.

f. Lincolnshire. Variety. Presented by - Dashwood, Esq.

g. Isle of Wight. Variety. Presented by — Cole, Esq. h. Great Britain. Variety. From Mr. J. Baker's collection.

i. Sternum. England. Presented by T. Ingall, Esq.

i-m. Four tracheæ. England. 2. Sternum. England. Presented by John Ray, Esq.

o. Skull. England. Presented by John Ray, Esq.

#### 6. QUERQUEDULA.

Querquedula, Steph. Gen. Zool. xii. p. 142 (1824). Nettion, Kaup, Naturl. Syst. der Eur. Thier. p. 95 (1829).

#### 1. Querquedula crecca. The Teal.

Anas crecca, Linn. S. N. i. p. 204; Temm. Man. d'Orn. 1815, p. 547; Leach, Syst. Cat. Man. & B. B. M: p. 38; Boie, Isis (1822), p. 564; Flem. Brit. An. p. 125; Brehm, Vog. Deuts. p. 884; Jenyns, Man. B. Vert. An. p. 235; Keys. & Bl. Wirbelth. Eur. p. 85; Naum. Vög. Deuts. (1842) xi. p. 701, t. 304; Schleg. Rev. Crit. des Ois. d'Eur. p. 113.

Querquedula crecca, Steph. Gen. Zool. xii. p. 146; Pr. Bonap. Geogr. Comp. List of B. p. 57; Eyton, Cat. Brit. B. p. 60; Macgill. Man. N. H. Ornith. ii. p. 167; G. R. Gray, Gen. of B.

iii. p. 616.

Querquedula subcrecca, Brehm, Vög. Deuts. p. 885, t. 42, f. 4. Querquedula creccoides, Brehm, Vog. Deuts. p. 886.

Nettion crecca, Kaup, Naturl. Syst. p. 95.

Teal, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 376, fig.; Penn. Brit. Zool. (1812) ii. p. 279; Yarr. Brit. B. 2 edit. iii. p. 281, fig.

Common Teal, Selby, Brit. Orn. ii. p. 315.

Pl. enl. 947; Gould, B. of Eur. pl. 362.

a. Carmarthenshire. From Col. Montagu's collection.

b. Great Britain. Presented by W. Yarrell, Esq.

c. Kirkwall. From Mr. J. Baker's collection. d—f. Kirkwall. Very young. From Mr. J. Baker's collection. g, h. Two trachese. England.

i. Sternum. England. Presented by T. Ingall, Esq.j. Sternum. England. Presented by John Ray, Esq.

k. Skull. England. Presented by John Ray, Esq.

# 2? QUERQUEDULA BIMACULATA. The Bimaculated Duck.

Anas glocitans (non Pallas), Flem. Brit. An. p. 125; Jenyns, Man. B. Vert. An. p. 232; Temm. Man. d'Orn. (1840) p. 533. Anas bimaculata (Penn.?), Keys. & Bl. Wirbelth. Eur. p. 85; Schleg. Rev. Crit. des Ois. d'Eur. p. 113. Mareca? glocitans, Steph. Gen. Zool. xii. p. 140?

Querquedula glocitans, Vigors, Linn. Trans. xiv. p. 559; Pr. Bonap. Geogr. Comp. List of B. p. 57; Eyton, Cat. Brit. B. p. 60; Macgill. Man. N. H. Ornith, ii. p. 168.

Querquedula bimaculata, G. R. Gray, Gen. of B. iii. p. 616.

Bimaculated Duck, Penn. Brit. Zool. (1776) ii. p. 510, pl. 100, f. 287; Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 355; Penn. Brit. Zool. (1812) ii. p. 274; Yarr. Brit. B. 2 edit. iii. p. 260, fig.; Zoologist, 1847, p. 1698.

Bimaculated Teal, Selby, Brit. Orn. ii. p. 321.

Gould, B. of Eur. pl. 363.

(Essex, &c.)

### 7. PTEROCYANEA.

Pterocyanea, Pr. Bonap. (1842). Cyanopterus, Eyton, Monogr. Anatidæ, p. 130 (1838).

# 1. PTEROCYANEA CIRCIA. The Garganey.

Anas querquedula, Linn. S. N. i. p. 203; Temm. Man. d'Orn. 1815, p. 545; Leach, Syst. Cat. Mam. & B. B. M. p. 38; Boie, Isis (1822), p. 564; Flem. Brit. An. p. 125; Jenyns, Man. B. Vert. An. p. 234; Keys. & Bl. Wirbelth. Eur. p. 84; Naum. Vög. Deuts. (1842) xi. p. 677, t. 303; Schleg. Rev. Crit. des Ois. d Eur. p. 116.

Anas circia, Linn. S. N. i. p. 204.

Querquedula circia, Steph. Gen. Zool. xii. p. 143, pl. 51; Brehm, Vög. Deuts. p. 881; Eyton, Cat. Brit. B. p. 60; Macgill. Man. N. H. Ornith. ii. p. 168.

Cyanopterus circia, Eyton, Monogr. Anutidæ, p. 130; Pr. Bonap.

Geogr. Comp. List of B. p. 57.

Pterocyanea circia, Pr. Bonap.; G. R. Gray, Gen. of B. iii. p. 617. Querquedula glaucopteros, Brehm, Vog. Deuts. p. 882.

Querquedula scapularis, Brehm, Vog. Deuts. p. 883.

Garganey, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 374, fg.; Penn. Brit. Zool. (1812) ii. p. 277, pl. 46, f. 1; Yarr. Brit. B. 2 edit. iii. p. 277, fig.

Garganey Teal, Selby, Brit. Orn. ii. p. 318.

Pl. enl. 946; Gould, B. of Eur. pl. 364.

a. Somersetshire. From. Col. Montagu's collection.

6. London Market. Male. From Mr. J. Baker's collection.

- c. London Market. Female. From Mr. J. Baker's collection.
- d, e. Two trachese. England.
- f. Sternum. England. Presented by T. Ingall, Esq. g. Sternum. England. Presented by John Ray, Esq.

#### 8. AIX.

Aix, Boie, Isis (1828), p. 329. Dendronessa, Swains. Fauna Bor. Amer. ii. p. 497 (1831). Lampronessa, Wagl. Isis (1832), p. 282.

#### 1. AIX SPONSA. The Summer Duck.

Anas sponsa, Linn. S. N. i. p. 207; Keys. & Bl. Wirbelth. Eur.

Aix sponsa, Boie, Isis (1828), p. 329; Pr. Bonap. Geogr. Comp.

List of B. p. 57; G. R. Gray, Gen. of B. iii. p. 614. Dendronessa sponsa, Swains. Faun. Bor. Amer. p. 446; Jenyns, Man. B. Vert. An. p. 237.

Lampronessa sponsa, Wagl. Isis (1832), p. 282.

Summer Duck, Lath. Syn. iii. p. 546.

Pl. enl. 980, 981.

(Dorking, Surrey).

#### 9. CHAULELASMUS.

Chaulelasmus, G. R. Gray, Pr. Bonap. Geogr. Comp. List of B. p. 58 (1838).

Chauliodus, Swains. Fauna Bor. Amer. p. 440 (1831). Ktinorhynchus, Eyton, Monogr. Anatidæ, p.

### 1. CHAULELASMUS STREPERA. The Gadwall.

Anas strepera, Linn. S. N. i. p. 200; Temm. Man. d'Orn. 1815, p. 539; Leach, Syst. Cat. Mam. & B. B. M. p. 38; Boie, Isis (1822), p. 564; Steph. Gen. Zool. xii. p. 103; Flem. Brit. An. p. 124; Brehm, Vog. Deuts. p. 870; Jenyns, Man. B. Vert. An. p. 231; Keys. & Bl. Wirbelth. Eur. p. 85; Naum. Vog. Deuts. (1842) xi. p. 659, t. 302.

Anas cinerea, (Gmel.), Brehm, Vög. Deuts. p. 871.

Chauliodus strepera, Swains. Journ. Roy. Inst. ii. p. 19; Eyton. Cat. Brit. B. p. 60.

Ktinorhynchus strepera, Eyton, Monogr. Anatida, p. 137.

Chaulelasmus strepera, G. R. Gray, List of Gen. of B. (1840) p. 74; Pr. Bonap. Geogr. Comp. List of B. p. 58; G. R. Gray, Gen. of B. iii. p. 617.

Querquedula strepera, Macgill. Man. N. H. Ornith. ii. p. 169. Gadwall, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 350; Penn, Brit. Zool. (1812) ii. p. 275; Yarr. Brit. B. 2 edit. iii. p. 249, fig. Common Gadwall, Selby, Brit. Orn. ii. p. 301.

Pl. onl, 958; Gould, B. of Eur. pl. 366.

a. Kent. From Col. Montagu's collection.

b. London Market. c. Great Britain.

d. Leadenball Market. Female. From Mr. J. Baker's collection. e-q. Three trachem. England.

h. Sternum. England. Presented by T. Ingall, Esq. i. Trachea. England. Presented by T. Ingall, Esq.

### 10. SPATULA,

Spatula, Boie, Isis (1822), p. 564. Rhynchaspis, Leach, Steph. Gen. Zool. xii. p. 114 (1824). Clypeata, Less. Man. d'Orn. ii. p. 416 (1828). Anas, Swains. (1831).

### 1. SPATULA CLYPEATA. The Shoveler.

Anas clypeata, Linn. S. N. i. p. 200; Temm. Man. d'Orn. 1815, p. 544; Leach, Syst. Cat. Mam. & B. B. M. p. 39; Jenyns, Man. B. Vert. An. p. 230; Naum. Vog. Deuts. (1842) xi. p. 747, t. 306; Schleg. Rev. Crit. des Ois. d'Eur. p. 115.

Anas rubens, Gmel. S. N. i. p. 519.

Spatula clypeata, Boie, Isis (1822) p. 564; G. R. Gray, Gen. of B.

iii. p. 618.

Rhynchaspis clypeata, Steph. Gen. Zool. xii. p. 115, pl. 48; Eyton. Cat. Brit. B. p. 61; Pr. Bonap. Geogr. Comp. List of B. p. 57; Keys, & Bl. Wirbelth. Eur. p. 85; Macgill. Man. N. H. Ornith. ii. p. 172.

Spathulea clypeata, Flem. Brit. An. p. 123. Clypeata macrorhynchus, Brehm, Vog. Deuts. p. 876. Clypeata platyrhynchus, Brehm, Vog. Deuts. p. 877. Clypeata pomarina, Brehm, Vog. Deuts. p. 878.

Clypeata brachyrhynchus, Brehm, Vog. Deuts. p. 879.

Shoveler, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 345, fig.; Yarr. Brit. B. 2 edit. iii. p. 242, fig.

Shoveler Duck, Penn. Brit. Zool. (1812) ii. p. 264.
Common Shoveler, Selby, Brit. Orn. ii. p. 297.
Red-breasted Shoveler, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 349; Penn. Brit. Zool. (1812) ii. p. 265.
Pl. enl. 971, 972; Gould, B. of Eur. pl. 360.

- a. Somersetshire. From Col. Montagu's collection.
   b-f. Lincolnshire. From Col. Montagu's collection.
- g. Hayling's Island. Presented by G. B. Tyndale, Esq.
- h. Great Britain.
- i. Trachea. England. Presented by T. Ingall, Esq.
- Sternum. England. Presented by T. Ingall, Esq. k—p. Six trachese. England.
- q. Sternum. England. Presented by John Ray, Esq.

#### 11. CAIRINA.

Cairina, Flem. Phil. of Zool. ii. p. 260 (1822). Moschatus, Less. Man. d'Orn. ii. p. 416 (1828).

# 1. CAIRINA MOSCHATA. The Muscovy Duck.

Anas moschata, Linn. S. N. i. p. 199.
Cairina moschata, Flem. Brit. An. p. 122; Jenyns, Man. B. Vert. An. p. 230; Eyton, Cat. Brit. B. p. 65; Keys. & Bl. Wirbelth. Eur. p. 85; G. R. Gray, Gen. of B. iii. p. 618.
Cairina sylvestris, Steph. Gen. Zool. xii. p. 79, pl. 46.
Anas bicolor, Don. Brit. B. pl. 212, var.
Muscovy Duck, Lath. Syn. iii. p. 476.
Musk Duck, Bew. Brit. B. (1804) ii. p. 320.
Pl. enl. 989.

# v. Fuligulinæ.

#### 1. BRANTA.

Branta, Boie, Isis (1822), p. 564. Netta, Kaup, Naturl. Syst. der Eur. Thier. p. 102 (1829). Callichen, Brehm, Vög. Deuts. p. 921 (1831). Mergoïdes, Eyton, Cat. Brit. B. p. 57 (1836).

# 1. BRANTA RUFINA. The Red-crested Whistling Duck.

Anas rufina, Pall. Reis. ii. p. 713; Gmel. S. N. i. p. 541; Temm. Man. d'Orn. 1815, p. 560; Naum. Vog. Deuts. (1844) xii. p. 7. t. 307; Schleg. Rev. Crit. des Ois. d'Eur. p. 121.

Branta rufina, Boie, Isis (1822), p. 564; G. R. Gray, Gen. of B.

iii. p. 620.

Fuligula rufina, Steph. Gen. Zool. xii. p. 188, pl. 54; Jenyns, Man. B. Vert. An. p. 240; Keys. & Bl. Wirbelth. Eur. p. 87.

Callichen ruficeps, Brehm, Vög. Deuts. p. 922, Callichen rufinus, Brehm, Vög. Deuts. p. 924, t. 42, f. 4; Pr. Bonap. Geogr. Comp. List of B. p. 58.

Netta rufina, Kaup, Naturl. Syst. p. 102.

Mergoides rufina, Eyton, Cat. Brit. B. p. 57.

Aythya rufina, Macgill. Man. N. H. Ornith. ii, p. 191.

Red-crested Pochard, Selby, Brit. Orn. ii. p. 350; Eyton, R. Brit. B. p. 77, fig.

Red-crested Whistling Duck, Yarr. Brit. B. 2 edit. iii. p. 327, fig. Pl. enl. 928; Gould, B. of Eur. pl. 369.

a. Milford Haven. Presented by the Earl of Cawdor.
 b. Great Britain. From Mr. Turner's collection.

c. Sternum. England. Presented by John Ray, Esq.

### 2. FULIGULA.

Fuligula, Steph. Gen. Zool. xii. p. 187 (1824). Platypus, Brehm (1830). Fulix, Sundev. (1836).

# 1. FULIGULA CRISTATA. The Tufted Duck.

Anas fuligula, Linn. S. N. i. p. 207; Temm. Man. d'Orn. 1815, p. 568; Naum. Vog. Deuts. (1844) xii. p. 64, t. 310; Schleg. Rev. Crit. des Ois. d'Eur. p. 119.

Anas scandiaca, Gmel. S. N. i. p. 520.

Anas cristata, Leach, Syst. Cat. Mam. & B. B. M. p. 39.

Fuligula cristata, Steph. Gen. Zool. xii. p. 190; Jenyns, Man. B. Vert. An. p. 244; Eyton, Cat. Brit. B. p. 57; Pr. Bonap, Geogr. Comp. List of B. p. 58; Keys. & Bl. Wirbelth. Eur. p. 87; Macgill. Man. N. H. Ornith. ii. p. 189; G. R. Gray, Gen. of B. iii. p. 621.

Nyroca fuligula, Flem. Phil. of Zool. ii. p. 260; Flem. Brit. An. D. 122.

Aythya fuligula, Boie, Isis (1822), p. 564; Brehm, Vog. Deuts. p. 914.

Aythya cristata, Brehm, Vög. Deuts. p. 916.

Platypus fuligula, Brehm.

Anas colymbis, Pall. Zoogr. ii. p. 266.

Tufted Duck, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 372, fig.; Penn. Brit. Zool. (1812) ii. p. 249; Yarr. Brit. B. 2 edit. iii. p. 351, fig.

Tufted Pochard, Selby, Brit. Orn. ii. p. 357.

Pl. enl. 1001; Gould, B. of Eur. pl. 370.

a. Great Britain. Presented by J. G. Children, Esq.

b, c. Great Britain. From Mr. Turner's collection.

d-f. Three trachese. England.

g. Sternum. England.

h. Sternum. England. Presented by John Ray, Esq.

#### 2. FULIGULA COLLARIS. The Collared Duck.

Anas collaris, Don. Brit. B. pl. 147. Fuligula rufitorquis, Pr. Bonap. Geogr. Comp. List of B. p. 58. Anas fuligula, Wils. Amer. Orn. pl. 67, f. 5. Fuligula collaris, G. R. Gray, Gen. of B. iii. p. 621. (Lincolnshire?)

# 3. Fuligula marila. The Scaup Duck.

Anas marila, Linn. S. N. i. p. 196; Temm. Man. d'Orn. 1815, p. 562; Leach, Syst. Cat. Mam. & B. B. M. p. 39; Naum. Vog. Deuts. (1844) xii. p. 88, t. 311; Schleg. Rev. Crit. des Ois. d'Eur. p. 120.

Anas frenata, Sparrm. Mus. Carls. t. 38.

Fuligula marila, Steph. Gen. Zool. xii. p. 198; Pr. Bonap. Geogr. Comp. List of B. p. 58; Jenyns, Man. B. Vert. An. p. 243; Keys. & Bl. Wirbelth. Eur. p. 87; Macgill. Man. N. H. Ornith. ii. p. 188; G. R. Gray, Gen. of B. iii. p. 621.

Fuligula Gesneri, Ray, Eyton, Cat. Brit. B. p. 58. Nyroca marila, Flem. Phil. of Zool. ii. p. 260; Flem. Brit. An. p. 122.

Red-headed Pochard, Selby, Brit. Orn. ii. p. 347. Pl. enl. 803; Gould, B. of Eur. pl. 367.

- a. Somersetshire. Female. From Col. Montagu's collection.
- b. Devonshire. Male. From Col. Montagu's collection.

c. Kent, Male.

d. London Market. Male. From Mr. J. Baker's collection. e. London Market. Female. From Mr. J. Baker's collection.

f. Trachea. England. Presented by T. Ingall, Esq. g. Sternum. England. Presented by T. Ingall, Esq.

h-j. Three trachem. England.

k. Sternum. England. Presented by John Ray, Esq.

### ? 2. Nyroca Ferinoïdes. Paget's Pochard.

Fuligula ferinoïdes, Bartl. Proc. Zool. S. 1847, p. 48; Ann. § Mag. Nat. Hist. 1847, p. 422; Fisher, in Zoologist, 1847, p. 1778,

Fuligula leucoptera, Newton, in Zoologist, 1848, p. 2063.

Fuligula mariloides, Yarr.

American Scaup, Yarr. Brit. B. 2 edit. iii. p. 347, fig.

A supposed new Duck, Fisher, in Zoologist, 1845, p. 1137.

(Leadenhall Market, and Rollesby Broad, near Yarmouth).

# 3. NYROCA LEUCOPHTHALMOS. The Ferrnginous Duck.

Anas nyroca, Gueld. Nov. Com. Petr. xiv. p. 403; Naum. Vög. Deuts. (1844) xii. p. 41, t. 309; Schleg. Rev. Crit. des Ois. d'Eur. p. 120.

Anas ferruginea, Gmel. S. N. i. p. 528.

Anas leucopthalmos, Bechst. Naturg. Deuts. iv. p. 1009; Temm. Man. dOrn. 1815, p. 571.

Anas africana, Gmel. S. N. i. p. 522. Anas glaucion, Pall. Zoogr. ii. p. 268.

Nyroca leucopthalmos, Flem. Brit. An. p. 121; Pr. Bonap. Geogr. Comp. List of B. p. 58; G. R. Gray, Gen. of B. iii. p. 621.
Avthya nyroca, Boie, Isis (1822), p. 564; Brehm, Vög. Deuts. p.

918; Macgill. Man. N. H. Ornith. ii. p. 192.

Fuligula nyroca, Steph. Gen. Zool. xii. p. 201, pl. 55; Kaup. Naturl. Syst. der Eur. Thier. p. 113; Jenyns, Man. B. Vert. An. p. 243; Eyton, Cat. Brit. B. p. 57; Keys. § Bl. Wirbelth. Eur. p. 87.

Aythya leucophthalmos, Brehm, Vög. Deuts. p. 917.

Ferruginous Duck, Mont. Orn. Dict. Suppl. pl.; Yarr. Brit. B. 2 edit. iii. p. 337, fig.

Nyroca Pochard, Selby, Brit. Orn. ii. p. 352. Olive-tufted Duck, Sow. Brit. Misc. i. pl. 21.

Pl. enl. 1000.

a. London Market. Male. From Mr. Bullock's collection.

b. London Market. Female. From Mr. Bullock's collection.
 c. ——? From Mr. J. Baker's collection.

- d. Norfolk. Female. From Mr. J. Baker's collection.
- e, f. Two tracheæ. England. Presented by T. Ingall, Esq.
- g. Sternum. England. Presented by T. Ingall, Esq. h. Sternum. England. Presented by John Ray, Esq.

#### 4. CLANGULA.

Clangula, Flem. Phil. of Zool. ii. p. 260 (1822). Histrionicus, Less. Man. d'Orn. ii. p. 415 (1828). Glaucion, Kaup, Naturl. Syst. der Eur. Thier. p. 53 (1829). Cosmonessa, Kaup, Naturl. Syst. der Eur. Thier. p. 46 (1829).

# 1. CLANGULA GLAUCION. The Golden-eye.

Anas clangula, Linn. S. N. i. p. 201; Temm. Man. d'Orn. 1815, p. 566; Leach, Syst. Cat. Mam. & B. B. M. p. 37; Naum. Vög. Deuts. (1844) xii. p. 162, t. 316; Schleg. Rev. Crit. des Ois. d'Eur. p. 118.

Anas glaucion, Linn. S. N. i. p. 401. Anas hyemalis, Pall. Zoogr. ii. p. 270.

Clangula clangula, Cuv., Boie, Isis (1822), p. 564: Flem. Phil. of

Zool. ii. p. 260.

Clangula chrysopthalmos. Steph. Gen. Zool. xii. p. 182, pl. 56; Jenyns, Man. B. Vert. An. p. 245; Pr. Bonap. Geogr. Comp. List of B. p. 58; Eyton, Cat. Brit. B. p. 59; Macgill. Man. N. H. Ornith. ii. p. 183.

Clangula vulgaris, Flem. Brit. An. p. 120.

Glaucion clangula, Kaup, Naturl. Syst. p. 53; Keys. & Bl. Wirbelth. Eur. p. 86.

Clangula leucomelas, Brehm, Vög. Deuts. p. 927. Clangula peregrina, Brehm, Vög. Deuts. p. 929. Clangula glaucion, Brehm, Vög. Deuts. p. 929; G. R. Gray, Gen. of B. iii. p. 622.

Golden-eye, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 367, fig.; Penn. Brit. Zool. (1812) ii. p. 253; Yarr. Brit. B. 2 edit. iii. p. 368, fig.

Morillon, Bew. Brit. B. (1804) ii. p. 371; Penn. Brit. Zool. (1812)

ii. p. 254.

Common Golden-eye Garrot, Selby, Brit. Orn. ii. p. 367.

Pl. enl. 802; Gould, B. of Eur. pl. 379.

- a, b. Carmarthenshire. From Col. Montagu's collection.
- c-e. Wales. Presented by the Earl of Cawdor.
- f. Great Britain. Presented by J. G. Children, Esq.
- g. Norfolk. Male. From Mr. J. Baker's collection.
- h-m. Six tracheæ. England.
- n. Sternum. England. Presented by John Ray, Esq.
- o. Norfolk. Female. From Mr. J. Baker's collection.

#### 2. CLANGULA HISTRIONICA. The Harlequin Duck.

Anas histrionica, Linn. S. N. i. p. 204; Temm. Man. d'Orn. 1815, p. 574; Naum. Vög. Deuts. (1844) xii. p. 199, t. 318; Schleg. Rev. Crit. des Ois. d'Eur. p. 119.

Anas minuta, Linn. S. N. i. p. 204.

Clangula histrionica, Boie, İsis (1822), p. 564; Flem. Phil. of Zool. ii. p. 260; Steph. Gen. Zool. xii. p. 180, pl. 57; Flem. Brit. An. p. 120; Pr. Bonap. Geogr. Comp. List of B. p. 58; Jenyns, Man. B. Vert. An. p. 246; Eyton, Cat. Brit. B. p. 59; Macgill. Man. N. H. Ornith. ii. p. 184; G. R. Gray, Gen. of B. iii. p. 622.

Harelda histrionica, Keys. & Bl. Wirbelth. Eur. p. 87.

Cosmonessa histrionica, Kaup, Naturl. Syst. p. 40.

Harlequin Duck, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii.
p. 269; Yarr. Brit. B. 2 edit. iii. p. 363, fig.; Eyton, R. Brit. B. p. 84, fig.

Harlequin Garnot, Selby, Brit. Orn. ii. p. 371.

Pl. enl. 798, 799; Gould, B. of Eur. pl. 381.

(North of Scotland, Orkney Island and Yarmouth).

#### 3. CLANGULA ALBEOLA. The Buffel-headed Duck.

Anas albeola, Linn. S. N. i. p. 199; Wils. Amer. Orn. viii. pl. 67, f. 2, 3; Schleg. Rev. Crit. des Ois. d'Eur. p. 119.

Anas bucephala, Linn. S. N. i. p. 200.

Anas rustica, Linn. S. N. i. p. 201.

Clangula albeola, Steph. Gen. Zool. xii. p. 184; Jenyns, Man. B. Vert. An. p. 246; Eyton, Cat. Brit. B. p. 67; G. R. Gray, Gen. of B. iii. p. 622.

Buffel-headed Duck, Yarr. Brit. B. 2 edit. iii. p. 374, fig.

Pl. enl. 948; Don. Brit. B. x. pl. 226.

a. Norfolk. From Mr. Hubbard's collection.

### 5. HARELDA.

Harelda, Leach, Steph. Gen. Zool. xii. p. 174 (1824). Pagonetta, Kaup, Naturl. Syst. der Eur. Thier. p. 66 (1829). Crymonessa, Macgill. Man. N. H. Ornith. ii. p. 185 (1842).

# 1. HARELDA GLACIALIS. The Long-tailed Duck.

Anas glacialis, Linn. S. N. i. p. 203; Temm. Man. d'Orn. 1815, p. 558; Naum. Vög. Deuts. (1844) xii. p. 210, t. 319; Schleg. Rev. Crit. des Ois. d'Eur. p. 117.

Auas hyemalis, Linn. S. N. i. p. 202.

Pagonetta glacialis, Kaup, Naturl. Syst. p. 66.

Anas longicauda, Leach, Syst. Cat. Mam. & B. B. M. p. 37. Crymonessa glacialis, Macgill. Man. N. H. Ornith. ii. p. 186.

Harelda glacialis, Steph. Gen. Zool. xii. p. 175, pl. 58; Jenyns, Man. B. Vert. An. p. 247; Pr. Bonap. Geogr. Comp. List of B. p. 59; Eyton, Cat. Brit. B. p. 59; Keys. & Bl. Wirbelth. Eur. p. 87; G. R. Gray, Gen. of B. iii. p. 622.

Clangula glacialis, Boie, Isis (1822), p. 564; Flem. Phil. of Zool. ii. p. 260; Flem. Brit. An. p. 121; Brehm, Vöy. Deuts. p. 937.

t. 44, f. 1.

Clangula hiemalis, Brehm, Vög. Deuts. p. 933. Clangula Faberi, Brehm, Vög. Deuts. p. 935. Clangula megauros, Brehm, Vög. Deuts. p. 936. Clangula musica, Brehm, Vög. Deuts. p. 937.

Clangula brachyrhynchus, Brehm, Vög. Deuts. p. 938.

Long-tailed Duck, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 363, fig.; Penn. Brit. Zool. (1812) ii. p. 268, pl. 44, upp. tig.; Yarr. Brit. B. 2 edit. iii. p. 355, fig.

Long-tailed Hareld, Selby, Brit. Orn. ii. p. 363.
Pl. enl. 1008, 999; Gould, B. of Eur. pl. 382.

a. Devonshire. From Col. Montagu's collection.

b. Orkney. From Mr. Bullock's collection.

c, d. Great Britain. Presented by H. L. Meyer, Esq.

e. Great Britain. Presented by Sir P. Grey Egerton, Bart., M.P.

f. Norfolk. From Mr. J. Baker's collection.

#### 6. ENICONETTA.

Eniconetta, G. R. Gray, List of Gen. of B. (1840) p. 75. Macropus, Nutt. Man. Orn. Polysticta, Eyton, Monogr. Anatidæ, p. (1838). Stelleria, Pr. Bonap. Geogr. Comp. List of B. p. 57 (1838).

### 1. ENICONETTA STELLERI. The Western Duck.

Anas Stelleri, Pall. Spic. Zool. vi. p. 35, t. 5; Gmel. S. N. i. p. 518; Schleg. Rev. Crit. des Ois. d'Eur. p. 116.

Anas dispar, Sparrm. Mus. Carls. t. 7, 8; Gmel. S. N. i. p. 535; Naum. Vög. Deuts. (1844) xii. p. 240, t. 320.

Anas occidua, Shaw, Nat. Misc. pl. 34.

Fuligula dispar, Steph. Gen. Zool. xii. p. 206; Jenyns, Man. B. Vert. An. p. 243.

Polysticta Stelleri, Eyton, Monogr. Anatidæ, p. 150; Eyton, Cat. Brit. B. p. 58.

Stelleria dispar, Pr. Bonap. Geogr. Comp. List of B. p. 57.

Harelda Stelleri, Keys. & Bl. Wirbelth. Eur. p. 87.

Eniconetta Stelleri, G. R. Gray, List of Gen. of B. (1840), p. 95; Gen. of B. iii. p. 624.

Clangula Stelleri, Boie, Isis (1822), p. 564; Macgill. Man. N. H. Ornith. ii. p. 183.

Western Duck, *Penn. Arct. Zool.* ii. p. 289, pl. 23; *Eyton, R. Brit. B.* p. 79, fig.

Western Pochard, Selby, Brit. Orn. ii. p. 360.

Steller's Western Duck, Yarr. Brit. B. 2 edit. iii. p. 305, fig.

Jard. & Selby, Illustr. of Ornith. pl. 66; Gould, B. of Eur. pl. 372.

(Caistor, near Yarmouth).

### 7. SOMATERIA.

Somateria, Leach, Flem. Phil. of Zool, ii. p. 260; Boie, Isis (1822), p. 564.

# 1. SOMATERIA MOLLISSIMA. The Eider Duck.

Anas mollissima, Linn. S. N. i. p. 198; Temm. Man. d Orn. 1815, p. 549; Naum. Vög. Deuts. (1844) xii. p. 252, t. 321 and 322, f. 1; Schleg. Rev. Crit. des Ois. d'Eur. p. 116.

Anas Cuthberti, Pall. Zoogr. ii. p. 235.

Anser lanuginosus, Leach, Syst. Cat. Mam. & B. B. M. p. 37.

Somateria mollissima, Boie, Isis (1822), p. 564; Flem. Phil. of Zool, ii. p. 260; Steph. Gen. Zool. xii. p. 224, pl. 60; Flem. Brit. An. p. 119; Pr. Bonap. Geogr. Comp. List of B. p. 57; Jenyns, Man. B. Vert. An. p. 237; Schleg. Rev. Crit. des Ois. d'Eur. p. 86; Macgill. Man. N. H. Ornith. ii. p. 177; G. R. Gray, Gen. of B. iii. p. 624.

Somateria St. Cuthberti, Eyton, Cat. Brit. B. p. 58.

Somateria danica, Brehm, Vog. Deuts. p. 890.

Somateria norwegica, Brehm, Vög. Deuts. p. 892, t. 43, f. 1. Somateria platyuros, Brehm, Vög. Deuts. p. 892.

Somateria faeroeensis, Brehm, Vog. Deuts. p. 893.

Somateria megauros, Brehm, Vog. Deuts. p. 894. Somateria islandics, Brehm, Vog. Deuts. p. 895.

Somateria borealis, Brehm, Vog. Deuts. p. 896.

Somateria Leisleri, Brehm, Vog. Deuts. p. 896.

Somateria planifrons, Brehm, Vog. Deuts. p. 897.

Eider or Edder Duck, Mont. Orn. Dict.

Eider Duck, Bew. Brit. B. (1804) ii. p. 314, fig.; Penn. Brit. Zool. (1812) ii. p. 243, pl. 40; Yarr. Brit. B. 2 edit. iii. p. 297,

Common Eider, Selby, Brit. Orn. ii. p. 338.

Pl. enl. 208, 209; Gould, B. of Eur. pl. 374.

u. Great Britain. b. Orkney Islands.

c. Damsa Holm, Orkney. Male. From Mr. J. Baker's collection.

d. Damsa Holm, Orkney. Female. From Mr. J. Baker's collec-

e. Damsa Holm, Orkney. Very young. From Mr. J. Baker's collection.

f. Trachea. England.

### 2. Somateria spectabilis. The King Duck.

Anas spectabilis, Linn. S. N. i. p. 195; Temm. Man. d'Orn. (1820) p. 851; Naum. Vög. Deuts. (1844), xii. p. 585, t. 322, f. 2, & t. 323; Schleg. Rev. Crit. des Ois. d'Eur. p. 116.

Anas mollissima, pt., Temm. Man. d'Orn. 1815, p. 549.

Somateria spectabilis (Leach), Boie, Isis (1822), p. 564; Flem. Phil. of Zool. ii. p. 260; Steph. Gen. Zool. xii. p. 229; Flem. Brit. An. p. 120; Jenyns, Man. B. Vert. An. p. 238; Pr. Bonap. Geogr. Comp. List of B. p. 57; Eyton, Cat. Brit. B. p. 58; Keys. & Bl. Wirbelth. Eur. p. 86; Macgill. Man. N. H. Ornith. ii. p. 178; G. R. Gray, Gen. of B. iii. p.

King Duck, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 246; Yarr. Brit. B. 2 edit. iii. p. 308, fig.

King Eider, Selby, Brit. Orn. ii. p. 343.

Sparrm. Mus. Carls. t. 39; Gould, B. of Eur. pl. 375. (Orkneys and Suffolk).

#### 8. OIDEMIA.

Oidemia, Flem. Phil. of Zool. ii. p. 260 (1822). Melanitta, Boie, Isis (1822), p. 564. Maceranus, Less. Man. d'Ornith. ii. p. 414 (1828). Macroramphus, Less. Man. d'Ornith. ii. p. 414 (1828). Pelionetta, Kaup, Naturl. Syst. der Eur. Thier. p. 107 (1829).

#### 1. OIDEMIA FUSCA. The Velvet Scoter.

Anas fusca, Linn. S. N. i. p. 196; Temm. Man. d'Orn. 1815, p. 552; Naum. Vög. Deuts. (1844) xii. p. 123, t. 313; Schleg. Rev. Crit. des Ois. d'Eur. p. 117.

Anas carbo, Pall. Zoogr. ii. p. 244.

Melanitta fusca, Boie, Isis (1822), p. 564; Brehm, Vog. Deuts. p. 905.

Oidemia fusca, Flem. Phil. of Zool. ii. p. 260; Steph. Gen. Zool. xii. p. 216; Flem. Brit. An. p. 119; Jenyns, Man. B. Vert. An. p. 239; Pr. Bonap. Geogr. Comp. List of B. p. 57; Eyton, Cat. Brit. B. p. 58; Keys. & Bl. Wirbelth. Eur. p. 86; Macgill. Man. N. H. Ornith. ii. p. 180; G. R. Gray, Gen. of B. iii. p. 625. Anas fuliginosa, Bechst. Naturg. Deuts. iv. p. 962, t. 36.

Melanitta Hornschuchii, Brehm, Vög, Deuts. p. 904.

Melanitta megapus, Brehm, Vög. Deuts. p. 906.

Melanitta platyrhynchos, Brehm, Vög. Deuts. p. 907.

Velvet Duck, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 322, fig.; Penn. Brit. Zool. (1812) ii. p. 247, pl. 41.

Velvet Scoter, Selby, Brit. Orn. ii. p. 333; Yarr. Brit. B. 2 edit. iii. p. 312, fig.

Pl. enl. 956; Gould, B. of Eur. pl. 377.

a, b. Loudon Market.

e. Leadenhall Market. Male. From Mr. J. Baker's collection.

d. Leadenhall Market. Young female. From Mr. J. Baker's collection.

e. Trachea. England.

### 2. OIDEMIA NIGRA. The Common Scoter.

Anas nigra, Linn. S. N. i. p. 196; Temm. Man. d'Orn. 1815, p. 554; Leach, Syst. Cat. Mam. & B. B. M. p. 39; Naum. Vög. Deuts. (1844) xii. p. 108, t. 312; Schleg. Rev. Crit. des Ois. d'Eur. p. 118.

Anas atra, Pall. Zoogr. ii. p. 247.

Anas cinerascens, Bechst. Naturg. Deuts. iv. p. 1025; Temm. Man. d'Orn. 1815, p. 556.

Anas cinerea, S. G. Gmel. Reis. ii. p. 184.

Oidemia nigra, Flem. Phil. of Zool. ii. p. 260; Steph. Gen. Zool. xii. p. 213, pl. 59; Flem. Brit. An. p. 119; Jenyns, Man. B. Vert. An. p. 239; Pr. Bonap. Geogr. Comp. List of B. p. 38; Eyton. Cat. Brit. B. p. 58; Keys. & Bl. Wirbelth. Eur. p. 86; Macgill. Man. N. H. Ornith. ii. p. 181; G. R. Gray, Gen. of B. iii. p. 625.

Melanitta nigra, Boie, Isis (1822), p. 564; Brehm, Vog. Deuts. p.

Melanitta nigripes, Brehm, Vög. Deuts. p. 901. Melanitta megauros, Brehm, Vög. Deuts. p. 902. Melanitta gibbera, Brehm, Vög. Deuts. p. 902.

Oidemia leucocephala, Flem. Brit. An. p. 119; Jenyns, Man. B. Vert. An. p. 240.

Scoter, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 324, fig.; Penn. Brit. Zool. (1812) ii. p. 248.

Black Scoter, Selby, Brit. Orn. ii. p. 329.

Common Scoter, Yarr. Brit. B. 2 edit. iii. p. 317, fig.

White-necked Duck, Penn. Brit. Zool.

Pl. enl. 978; Gould, B. of Eur. pl. 378.

a, b. Somersetshire. From Col. Montagu's collection.

c. Somersetshire. Presented by the Hon. W. E. Fitzmaurice.

d. Wales. Presented by the Earl of Cawdor.

e. London Market. From Mr. J. Baker's collection.

f. Trachea. England.

g. Sternum. England. Presented by John Ray, Esq.

#### 3. OIDEMIA PERSPICILLATA. The Surf Scoter.

Anas perspicillata, Linn. S. N. i. p. 201; Temm. Man. d'Orn. (1820) ii. p. 853; Naum. Vög. Deuts. (1844) xii. p. 140, t. 314; Schleg. Rev. Crit. des Ois. d'Eur. p. 117.
Oidemia perspicillata, Steph. Gen. Zool. xii. p. 219; Flem. Brit. An. p. 119; Jenyns, Man. B. Vert. An. p. 240; Eyton, Cat. Brit. B. p. 59; Pr. Bonap. Geogr. Comp. List of B. p. 376; Keys. & Bl. Wirbelth. Eur. p. 86; Macgill. Man. N. H. Ornith. ii. p. 181; G. R. Gray, Gen. of B. iii. p. 625.
Melanitta perspicillata, Boie, Isis (1822), p. 564.
Pelionetta perspicillata, Kaup, Naturl. Syst. p. 107.
Surf Duck, Eyton, Hist. R. Brit. B. p. 81, fig.
Surf Scoter, Yarr. Brit. B. 2 edit. iii. p. 321, fig.
Pl. enl. 995; Gould, B. of Eur. pl. 377.
(Orkneys).

# vi. Merginæ.

# 1. MERGUS.

Mergus, Linn. S. N. (1735). Merganser, Briss. Ornith. vi. p. 230 (1760).

### 1. MERGUS CASTOR. The Goosander.

Mergus merganser, Linn. S. N. i. p. 209; Temm. Man. d'Orn. 1815, p. 575; Boie, Isis (1822), p. 564; Flem. Brit. An. p. 128; Brehm, Vög. Deuts. p. 943; Jenyns, Man. B. Vert. An. p. 249; Eyton, Cat. Brit. B. p. 56; Naum. Vög. Deuts. (1844) xii. p. 356, t. 326; Schleg. Rev. Crit. des Ois. d'Eur. p. 121.

Mergus castor, Linn. S. N. p. 209; Brehm, Vög. Deuts. p. 944; Keys. & Bl. Wirbelth. Eur. p. 88; G. R. Gray, Gen. of B. iii.

p. 629.

Merganser Raii, Leach, Syst. Cat. Mam. & B. B. M. p. 36.

Merganser gulo, Steph. Gen. Zool. xii. p. 161, pl. 53; Leach, Syst. Cat. Mam. & B. B. M. p. 36.

Merganser castor, Pr. Bonap. Geogr. Comp. List of B. p. 59;

Macgill. Man. N. H. Ornith. ii. p. 194.

Goosander, Mont. Orn. Dict; Bew. Brit. B. (1804) ii. p. 254, fig.; Penn, Brit. Zool, (1812) ii. p. 211, pl. 37; Yarr. Brit. B. 2 edit. iii. p. 395, fig.

Dun Diver, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 257, fig.; Penn. Brit. Zool. (1812) ii. p. 213.

Gould, B. of Eur. pl. 384.

a. Great Britain. From Col. Montagu's collection.

b. Gloucestershire. From Col. Montagu's collection.
 c. Rendlesham Park, Suffolk. Presented by the Rev. H. Kirby.

d. Norfolk. Presented by Joseph Sabine, Esq.

e. Norfolk. Male, From Mr. J. Baker's collection.

f. (Norfolk). Leadenhall Market. Young male. From Mr. J. Baker's collection.

 (Norfolk). Leadenhall Market. Female. From Mr. J. Baker's collection.

h-j. Three traches. England.

# 2. MERGUS SERRATOR. The Red-breasted Merganser.

Mergus serrator, Linn. S. N. i. p. 208; Temm. Man. d'Orn. 1815, p. 579; Boie, Isis (1822), p. 564; Flom. Brit. An. p. 129; Brehm, Vög. Deuts. p. 945; Jenyns, Man. B. Vert. An. p. 249; Eyton, Cat. Brit. B. p. 56; Keys. & Bl. Wirbelth. Eur. p. 88; Naum. Vög. Deuts. (1844) xii. p. 333, t. 325; Schleg. Rev. Crit. des Ois. d'Eur. p. 121; G. R. Gray, Gen. of B. iii. p. 629.

Mergus serratus, Gmel. S. N. i. p. 546.

Mergus niger, Gmel. S. N. i. p. 546.

Mergus leucomelas, Brehm, Vog. Deuts. p. 947.

Merganser cristatus, Leach, Syst. Cat. Mam. & B. B. M. p. 36.

Merganser serrata, Steph. Gen. Zool. xii. p. 165.

Merganser serrator, Pr. Bonap, Geogr. Comp. List of B. p. 59;

Macgill. Man, N. H. Ornith. ii. p. 195.

Red-breasted Merganser, Mont. Orn. Diet.; Bew. Brit. B. (1804) ii. p. 261, fig.; Penn. Brit. Zool. (1812) ii. p. 214, pl. 38; Selby, Brit. Orn. ii. p. ; Yarr. Brit. B. 2 edit. ii. p. 389, fig.

Pl. enl. 207; Gould, B. of Eur. pl. 385.

a. Gloucestershire. From Col. Montagu's collection.
b, c. Great Britain. From Mr. Pellerin's collection.

d, e. Scotland. Male and female. From Mr. J. Baker's collection. f. ———? Leadenhall Market. From Mr. J. Baker's collection. g, h. Two traches. England.

i. Sternum. England.

j. Sternum. England. Presented by John Ray, Esq.

k. Skeleton. England.

# 3. MERGUS CUCULLATUS. The Hooded Merganser.

Mergus cucullatus, Linn. S. N. i. p. 207; Jenyns, Man. B. Vert-An. p. 249; Eyton, Cat. Brit. B. p. 57; Keys. & Bl. Wirbelth. Eur. p. 88; Schleg. Rev. Crit. des Ois. d'Eur. p. 121; G. R. Gray, Gen. of B. iii. p. 629.

Merganser cucullatus, Steph. Gen. Zool. xii. p. 168; Pr. Bonap. Geogr. Comp. List of B. p. 59; Macgill. Man. N. H. Ornith.

ii. p. 196.

Hooded Merganser, Selby, Trans. Nat. Hist. Northumb. i. p. 292; Eyton, Hist. R. Brit. B. p. 75, fig.; Yarr. Brit. B. 2 edit. iii. p. 383, fig.

Gould, B. of Eur. pl. 386.

(Yarmouth and Norfolk).

a. Sternum. England. Presented by John Ray, Esq.

#### 2. MERGELLUS.

Mergellus, Selby, Cat. Gen. & Subgen. of Birds, p. 47 (1840). Mergus, Steph. Gen. Zool. xii. p. 156 (1824).

### 1. MERGELLUS ALBELLUS. The Smew.

Mergus albellus, Linn. S. N. i. p. 209; Temm. Man. d'Orn. p. 581; Leach, Syst. Cat. Mam. § B. B. M. p. 36; Boie, Isis (1822), p. 564; Steph. Gen. Zool. xii. p. 157, pl. 52; Flem. Brit. An. p. 129; Brehm, Vög. Deuts. p. 941; Pr. Bonap. Geogr. Comp. List of B. p. 59; Jenyns, Man. B. Vert. An. p. 250; Eyton, Cat. Brit. B. p. 57; Keys. § Bl. Wirbelth. Eur. p. 88; Naum. Vög. Deuts. (1844) xii. p. 314, t. 324; Schleg. Rev. Crit. des Ois. d'Eur. p. 122; Macgill. Man. N. H. Ornith. ii. p. 197. Mergus minutus, Linn. S. N. i. p. 209; Brehm, Vög. Deuts. p. 942. Mergus asiaticus, S. G. Gmel. Reis. ii. p. 188, t. 20.

Mergus stellatus, Brünn. Orn. Bor. No. 98. Mergus glacialis, Brünn. Orn. Bor. No. 99.

Mergellus albellus, Selby, Cat. Gen. & Subgen. of Birds, p.

G. R. Gray, Gen. of B. iii. p. 629.

Smew, Mont. Orn. Diet.; Bew. Brit. B. (1804) ii. p. 264, fig.; Penn. Brit. Zool. (1812) ii. p. 216; Selby, Brit. Orn. ii. p. 385; Yarr. Brit. B. 2 edit. iii. p. 378, fig.

Minute Merganser, Mont. Orn. Dict.

Red-headed Smew, Bew. Brit. B. (1804) ii. p. 266. Lough-Diver, Bew. Brit. B. (1804) ii. p. 268.

Pl. enl. 449, 450; Gould, B. of Eur. pl. 387.

a, b. Gloucestershire. From Col Montagu's collection. c—e. Great Britain. Presented by H. L. Meyer, Esq. f. Devonshire.

g. Great Britain. Presented by J. Sabine, Esq.

h. Great Britain. Male. From Mr. J. Baker's collection.
i. Great Britain. Female. From Mr. J. Baker's collection.

j-m. Four trachem. England.

n. Sternum. England. Presented by John Ray, Esq.

# FAM. II. COLYMBIDÆ.

i. COLYMBINÆ.

# 1. COLYMBUS.

Colymbus, Linn. S. N. (1735). Cepphus, Mahr. Avium Gen. p. 69 (1752). Urinator, Cuv. (1799—1800). Eudytes, Ill. Prodr. Mam. & Av. p. 282 (1811).

# 1. COLYMBUS GLACIALIS. The Great Northern Diver.

Colymbus glacialis, Linn. S. N. i. p. 221; Temm. Man. d'Orn. 1815, p. 597; Leach, Syst. Cat. Mam. & B. B. M. p. 35; Boie, Isis (1822), p. 561; Steph. Gen. Zool. xii. p. 233, pl. 61; Flem Brit. An. p. 132; Brehm, Vög. Deuts. p. 970; Jenyns, Man. B. Vert. An. p. 255; Eyton, Cat. Brit. B. p. 48; Pr. Bonap. Geogr. Comp. List of B. p. 65; Schleg. Rev. Crit. des Ois. d'Eur. p. 106; G. R. Gray, Gen. of B. iii. p. 631.

Colymbus torquatus, Brünn. Orn. Bor. No. 134; Keys. & Bl. Wirbelth. Eur. p. 91.

Colymbus immer, Linn. S. N. i. p. 222; Leach, Syst. Cat. Mam. § B. B. M. p. 36.

Colymbus maximus, Brehm, Vög. Deuts. p. 971.

Colymbus hiemalis, Brehm, Vög. Deuts. p. 972.

Cepphus torquatus, Pall. Zoogr. ii. p. 340.

Eudyptes glacialis, Illig. Prod. p. 282; Naum. Vög. Deuts. (1844) xii. p. 397, t. 327.

Colymbus atrogularis, Meyer, Taschenb. Deuts. ii. p. 449.

Northern Diver, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 165; Selby, Brit. Orn. ii. p. 406.

Great Northern Diver, Bew. Brit. B. (1804) ii. p. 183, fig.; Yarr. Brit. B. 2 edit. iii. p. 425, fig.

Imber Diver, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 167.

Imber, Bew. Brit. B. (1804) ii. p. 185, fig.
Pl. enl, 952; Gould, B. of Eur. pl. 393.

a. Cornwall. Adult. From Col. Montagu's collection.

b. Great Britain. Adult.

c. Devonshire. Young. From Col. Montagu's collection.

d. _____?

e. Sternum. England.

f. Sternum. England. Presented by John Ray, Esq. g. Sternum. England. Presented by Mr. J. Baker.

h, i. Two tracheæ. England.

# 2. COLYMBUS ARCTICUS. The Black-throated Diver.

Colymbus arcticus, Linn. S. N. i. p. 221; Temm. Man. d'Orn. 1815, p. 599; Leach, Syst. Cat. Mam. & B. B. M. p. 36; Boie, Isis (1822), p. 561; Steph. Gen. Zool. xii. p. 236; Flem. Brit. An. p. 133; Brehm, Vög. Deuts. p. 973; Jenyns, Man. B. Vert. An. p. 256; Eyton, Cat. Brit. B. p. 48; Pr. Bonap. Geogr. Comp. List of B. p. 65; Keys. & Bl. Wirbelth. Eur. p. 91; Schleg. Rev. Crit. des Ois. d'Eur. p. 106; G. R. Gray, Gen. of B. iii. p. 631. Eudyptes arcticus, Illig. Prod. p. 282; Naum. Vög. Deuts. (1844) xii. p. 418, t. 328.

Colymbus macrorhynchos, Brehm, Vög. Deuts. p. 974.

Colymbus balthicus, Horsch. & Schill.; Brehm, Vog. Deuts. p. 975.

Cepphus arcticus, Pall. Zoogr. ii. p. 91.

Black-throated Diver, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 195; Penn. Brit. Zool. (1812) ii. p. 170; Selby, Brit. Orn. ii. p. 411; Yarr. Brit. B. 2 edit. iii. p. 434, fig.

Lesser Imber, Bew. Brit. B. (1804) ii. p. 187, fig.?

Pl. enl. 914; Edwards, Birds, pl. 146; Gould, B. of Eur. pl. 394.

a. Northumberland.

b. Great Britain.

c. Great Britain. From Mr. Turner's collection.

d. Fulham. Presented by W. J. Broderip. Esq.

### 3. COLYMBUS SEPTENTRIONALIS. The Red-throated Diver.

Colymbus septentrionalis, Linn. S. N. i. p. 220; Temm. Man. d'Orn. 1815, p. 602; Leach, Syst. Cat. Mam. & B. B. M. p. 36; Boie, Isis (1822), p. 561; Steph. Gen. Zool. xii. p. 238; Flem. Brit. An. p. 133; Brehm, Vög. Deuts. p. 978; Jenyms, Man. B. Verl. An. p. 257; Eyton, Cat. Brit. B. p. 48; Pr. Bonap. Geogr. Comp. List of B. p. 65; Keys. & Bl. Wirbelth. Eur. p. 91; Schleg. Rev. Crit. des Ois. d'Eur. p. 106; G. R. Gray, Gen. of B. iii. p. 631.

Eudyptes septentrionalis, Illig. Prod. p. 282; Naum. Vog. Deuts.

(1844) xii. p. 435, t. 329.

Colymbus stellatus, Gmel. S. N. i. p. 587; Leach, Syst. Cat. Mam. & B. B. M. p. 35.

Colymbus horealis, Lath. Ind. Orn. ii. p. 801; Brehm, Vog. Deuts.

p. 979.

Colymbus striatus, Gmel. S. N. i. p. 586.
 Colymbus lumme, Brünn. Orn. Bor. p. 39, No. 132; Brehm, Vög. Deuts. p. 978.

Cepphus septentrionalis, Pall. Zoogr. ii. p. 342.

Colymbus rufogularis, Meyer, Taschenb. Deuts. ii. p. 453.

Red-throated Diver, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 193, fig.; Penn. Brit. Zool. (1812) ii. p. 169, pl. ; Selby, Brit. Orn. ii. p. 414; Yarr. Brit. B. 2 edit. iii. p. 441, fig.

Speckled Diver, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 168.

First Speckled Diver, Bew. Brit. B. (1804) ii. p. 189, fig. Second Speckled Diver, Bew. Brit. B. (1804) ii. p. 191, fig.

Pl. enl. 308, 992; Gould, B. of Eur. pl. 395.

a. Devonshire. From Col. Montagu's collection.

b. Sussex. From Col. Montagu's collection.

c. Sternum. England. Presented by John Ray, Esq.

### ii. Podicipinæ.

#### 1. PODICEPS.

ceps, Lath. Ind. Orn. ii. p. 780. mbus, Briss. Ornith. vi. p. 33. haithyia, Kaup, Naturl. Syst. der Eur. Thier. p. 72 (1829). s, Kaup, Naturl. Syst. der Eur. Thier. p. 41 (1829). etaithya, Kaup, Naturl. Syst. der Eur. Thier. p. 49 (1829). etaithya, Kaup, Naturl. Syst. der Eur. Thier. p. 44 (1829). eocyclus, Pr. Bonap. (1832). elymbus, Less. Tr. d'Orn. p. 595 (1831). yptilus, Swains. Classif. of B. ii. p. 369 (1837).

### a. PEDETAITHYA.

# 1. Podiceps grisegena. The Red-necked Grebe.

mbus rubricollis, Gmel. S. N. i. p. 592; Naum. Vög. Deuts. 838) ix. p. 720, t. 243. mbus grisegena, Bodd. Table des Pl. Enl. de d'Aubent. p. 55. mbus subcristatus, Gmel. S. N. i. p. 590. mbus parotis, Sparrm. Mus. Carls. t. 9. iceps rubricollis, Lath. Ind. Orn. ii. p. 783; Temm. Man. d'Orn. 315, p. 465; Leach, Syst. Cat. Mam. & B. B. M. p. 35; Boie, is (1822), p. 561; Steph. Gen. Zool. xiii. p. 8; Flem. Brit. An. 131; Brehm, Vog. Deuts. p. 956; Jenyns, Man. B. Vert. An. 252; Pr. Bonap. Geogr. Comp. List of B. p. 65; Eyton, Cat. rit. B. p. 47; Schleg. Rev. Crit. des Ois. d'Eur. p. 105; Macgill. Ian. N. H. Ornith. ii. p. 203. iceps subcristatus, Bechst. Naturg. Deuts. p. ; Brehm, Vög. euts. p. 957; Keys. & Bl. Wirbelth. Eur. p. 90. iceps grisegena, G. R. Gray, Gen. of B. iii. p. 633. iceps canogularis, Brehm, Vog. Deuts. p. 958. mbus cucullatus, Pall. Zoogr. ii. p. 355. mbus nævius, Pall. Zoogr. ii. p. 356. etaithya subcristatus, Kaup, Naturl. Syst. p. 44. -necked Grebe, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 52, fig.; Penn. Brit. Zool. (1812) ii. p. 139; Selby, Brit. Orn. p. 392; Yarr. Brit. B. 2 edit. iii. p. 407, fig. l. enl. 931; Gould, B. of Eur. pl. 389.

reat Britain. From Col. Montagu's collection.
Yarmouth. From Mr. Gould's collection.
ternum. England. Presented by John Ray, Esq.

# b. DYTES.

### 2. Podiceps connutus. The Sclavonian Grebe.

Colymbus cornutus, Gmel. S. N. i. p. 591; Naum. Vog. Deuts.

(1838) ix. p. 739, t. 244.

Podiceps cornutus, Lath. Ind. Orn. ii. p. 783; Temm. Man. d'Orn. 1815, p. 466; Leach, Syst. Cat. Mam. & B. B. M. p. 35; Boie, Isis (1822), p. 561; Steph. Gen. Zool. xiii. p. 9; Flem. Brit. An. p. 131; Brehm, Vög. Deuts. p. 959; Jenyns, Man. B. Vert. An. p. 252; Eyton, Cat. Brit. B. p. 47; Pr. Bonap. Geogr. Comp. List of B. p. 65; Keys. & Bl. Wirbelth. Eur. p. 90; Schleg. Rev. Crit. des Ois. d'Eur. p. 105; Macgill. Man. N. H. Ornith. ii. p. 203; G. R. Gray, Gen. of B. iii. p. 633.

Podiceps obscurus, Lath. Ind. Orn. ii. p. 782; Leach, Syst. Cat.

Mam. & B. B. M. p. 35.

Podiceps caspicus, Lath. Ind. Orn. ii. p. 784. Colymbus obscurus, Gmel. S. N. i. p. 592. Colymbus caspicus, S. G. Gmel. Reis. iv. p. 137. Colymbus nigricans, Scop. Ann. i. No. 101?

Podiceps bicornis, Brehm, Vog. Deuts, p. 960, t. 44, f. 4. Dytes cornutus, Kaup, Naturi. Syst. der Eur. Thier. p. 41.

Sclavonian Grebe, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 141; Yarr. Brit. B. 2 edit. iii. p. 411, fig.

Horned Grebe, Selby, Brit. Orn. ii. p. 397.

Dusky Grebe, Mont. Orn. Dict.; Bew. Brit, B. (1804) ii. p. 150, fig.; Penn. Brit. Zool. (1812) ii. p. 136.

Pl. enl. 404, 942; Gould, B. of Eur. pl. 390.

a. Great Britain. Adult. From Col. Montagu's collection.
 b—d. Great Britain.

e. Devonshire.

f. Sternum. England. Presented by T. Ingall, Esq.

y, h. Two trachew. England.

i. Sternum. England. Presented by John Ray, Esq.

# c. Podiceps.

# 3. Podiceps Cristatus. The Great Crested Grebe.

Colymbus cristatus, Linn. S. N. i. p. 222; Naum. Vög. Deuts. (1838) ix. p. 686, t. 242.

Podiceps cristatus, Lath. Ind. Orn. ii. p. 394; Temm. Man. d'Orn. 1815, p. 462; Leach, Syst. Cat. Mam. & B. B. M. p. 35; Boie, Isis (1822), p. 561; Steph. Gen. Zool. xiii. p. 3; Flem. Brit. An. p. 131; Brehm, Vög. Deuts. p. 952; Jenyns, Man. B. Vert. An. p. 251; Eyton, Cat. Brit. B. p. 47; Pr. Bonap. Geogr. Comp. List of B. p. 65; Keys. & Bl. Wirbelth. Eur. p. 90; Schleg. Rev. Crit. des Ois. d'Eur. p. 104; Macgill. Man. N. H. Ornith. ii. p. 202; G. R. Gray, Gen. of B. iii. p. 633.

Colymbus urinator, Linn. S. N. i. p. 223.
Podiceps mitratus, Brehm, Vög. Deuts. p. 953.
Podiceps patagiatus, Brehm, Vög. Deuts. p. 954.
Colymbus cornutus, Pall. Zoogr. ii. p. 353.
Lophaithyia cristata, Kaup, Naturl. Syst. p. 72.

Crested Grebe, Mont. Orn. Dict.; Selby, Brit. Orn. ii. p. 394.

Great Crested Grebe, Bew. Brit. B. (1804) ii. p. 145, fig.; Penn. Brit. Zool. (1812) ii. p. 130; Yarr. Brit. B. 2 edit. iii. p. 400, fig.

Tippet Grebe, Bew. Brit. B. (1804) p. 147, fig.; Penn. Brit. Zool. (1812) ii. p. 134.

Pl. enl. 400, 941, 944; Gould, B. of Eur. pl. 388.

a. Devonshire. Male. From Col. Montagu's collection.
 b. Devonshire. Female. From Col. Montagu's collection.

c. Devonshire. Young.

d. Great Britain. Presented by W. Yarrell, Esq.

e, f. Great Britain.

g. Trachea, England.h. Two sterna. England. Presented by John Ray, Esq.

# d. Proctopus.

# 4. Podicers Aubitus. The Eared Grebe.

Colymbus auritus, Linn. S. N. i. p. 222; Naum. Vög. Deuts. (1838)

ix. p. 768, t. 246.

Podiceps auritus, Lath. Ind. Orn. ii. p. 781; Temm. Man. d'Orn. 1815, p. 469; Leach, Syst. Cat. Mam. & B. B. M. p. 35; Boie, Isis (1822), p. 561; Steph. Gen. Zool. xiii. p. 12; Flem. Brit. An. p. 132; Brehm, Vög. Deuts. p. 963; Jenyns, Man. B. Vert. An. p. 253; Eyton, Cat. Brit. B. p. 48; Pr. Bonap. Geogr. Comp. List of B. p. 64; Keys. & Bl. Wirbelth. Eur. p. 90; Schleg. Rev. Crit. des Ois. dEur p. 105; Macgill. Man. N. H. Ornith. ii. p. 204; G. R. Gray, Gen. of B. iii. p. 633.

Podiceps nigricollis, Brehm, Vog. Deuts. p. 963.

Proctopus auritus, Kaup, Naturl. Syst. p. 49.

Eared Grebe, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 149;
 Penn. Brit. Zool. (1812) ii. p. 135; Selby, Brit. Orn. ii. p. 399;
 Yarr. Brit. B. 2 edit. iii. p. 417, fig.

Edwards, Birds, pl. 96, f. 2; Gould, B. of Eur. pl. 391.

a. Cornwall. From Col. Montagu's collection.
b. Yarmouth. From Mr. Gould's collection.

c. Sternum. England. Presented by John Ray, Esq.

### e. Sylbeocyclus.

### 5. Podiceps Minon. The Little Grebe.

Colymbus cristatus, Gmel. S. N. i. p. 589, var. Colymbus minor, Gmel. S. N. i. p. 591; Naum. Vög. Deutz. (1838)

ix. p. 785, t. 247.

Podiceps minor, Lath. Ind. Orn. ii. p. 784; Temm. Man. d'Orn. 1815, p. 471; Leach, Syst. Cat. Mam. § B. B. M. p. 35; Boie, Isis (1822), p. 561; Steph. Gen. Zool. xiii. p. 13, pl. 2; Flem. Brit. An. p. 132; Brehm, Vög. Deuts. p. 966; Jenyus, Man. B. Vert. An. p. 254; Eyton, Cat. Brit. B. p. 48; Keys. § Bl. Wirbelth. Eur. p. 90; Schleg. Rev. Crit. des Ois. d'Eur. p. 105; G. R. Gray, Gen. of B. iii. p. 633.

Colymbus hebridicus, Gmel. S. N. i. p. 594; Sow. Brit. Misc.

pl. 70.

Podiceps hebridicus, Lath. Ind. Orn. ii. p. 785; Leach, Syst. Cat. Mam. & B. B. M. p. 35; Brehm, Vög. Deuts. p. 964.

Colymbus pyrenaicus, La Peyr. Neue Schwed. abh. iii. p. 105. Podiceps pygmæus, Brehm, Vög. Deuts. p. 966.

Sylbeocyclus minor, Pr. Bonap. Geogr. Comp. List of B. p. 64. Sylbeocyclus enropæus, Macgill. Man. N. H. Ornith. ii. p. 205.

Little Grebe, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 154, fig.; Penn. Brit. Zool. (1812) ii. p. 137; Selby, Brit. Orn. ii. p. 401.

Black-chin Grebe, Mont. Orn. Dict.; Bew. Brit. B. (1804) p. 156; Penn. Brit. Zool. (1812) ii. p. 138.

Little Grebe or Dabchick, Yarr. Brit. B. 2 edit. iii. p. 420, fig.

Pl. enl. 905; Gould, B. of Eur. pl. 392.

a. Chelsea. From Col. Montagu's collection.

b. Devonshire. From Col. Montagu's collection.

c. Great Britain. Presented by J. Gould, Esq.

d. Great Britain. Young.

e, f. Cambridgeshire. Young. Presented by Mr. J. Baker. g, h. Great Britain. Young. Presented by J. Gould, Esq.

i. Sternum. England. Presented by John Ray, Esq.

# FAM. III. ALCIDÆ.

### i. Alcinæ.

### 1. ALCA.

Alca, Linn. S. N. (1744). Pinguinus, Bonn. Encyc. Meth. p. 28 (1790). Chenalopex, Mæhr. Av. Gen. p. 68 (1752).

#### 1. ALCA IMPENNIS. The Great Auk.

Alca impennis, Linn. S. N. i. p. 210; Temm. Man. d'Orn. (1820) ii. p. 939; Boie, Isis (1822) p. 562; Steph. Gen. Zool. xiii. p. 51, pl. 6; Flem. Brit. An. p. 129; Jenyns, Man. B. Vert. An. p. 261; Eyton, Cat. Brit. B. p. 50; Pr. Bonap. Geogr. Comp. List of B. p. 66; Keys. & Bl. Wirbelth. Eur. p. 91; Naum. Vög. Deuts. (1844) xii. p. 630, t. 337; Schleg. Rev. Crit. des Ois. d'Eur. p. 107; Macgill. Man. N. H. Ornith. ii. p. 217; G. R. Gray, Gen. of B. iii. p. 637.

Great Auk, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 162, fig.; Penn. Brit. Zool. (1812) ii. p. 146, pl. 26; Selby, Brit. Orn. ii. p. 433; Yarr. Brit. B. 2 edit. iii. p. 476, fig.

Pl. enl. 367; Gould, B. of Eur. pl. 400.

a. Papa Westra, Orkney. From Mr. Bullock's collection.

# 1. ALCA TORDA. The Razor-bill.

Alca torda, Linn. S. N. i. p. 210; Brünn. Orn. Bor. p. 25; Temm. Man. d'Orn. 1815, p. 616; Flem. Brit. An. p. 130; Brehm, Vög. Deuts. p. 1003; Jenyns, Man. B. Vert. An. p. 260; Eyton, Cat. Brit. B. p. 49; Keys. & Bl. Wirbelth. Eur. p. 91; Naum Vög. Deuts. (1844) xii. p. 606, t. 336; Schleg. Rev. Crit. des Ois. d'Eur. p. 108; Macgill. Man. N. H. Ornith. ii. p. 216; G. R. Gray, Gen. of B. iii. p. 637.

Alca pica, Linn. S. N. i. p. 210.

Alca balthica, Brunn, Orn. Bor. p. 101.

Alea unisulcata, Brünn. Orn. Bor. p. 102.

Alea glacialis, Brehm, Vog. Deuts. p. 1004.

Alca islandica, Brehm, Vog. Deuts. p. 1005, t. 46, f. 2.

Utamania torda, Leach, Syst. Cat. Mam. & B. B. M. p. 42; Steph. Gen. Zool. xiii. p. 27; Pr. Bonap. Geogr. Comp. List of B. p. 66.

Utamania pica, Leach, Syst. Cat. Mam. & B. B. M. p. 42; Steph.

Gen. Zool. xiii. p. 30.

Razor-bill, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 164, fig.; Yarr. Brit. B. 2 edit. iii. p. 473, fig.

Razor-bill Auk, Penn. Brit. Zaol. (1812) ii. p. 148; Selby, Brit.

Orn. ii. p. 435.

Black-billed Auk, Bew. Brit. B. (1804) ii. p. 167.

Pl. enl. 1003, 1004; Gould, B. of Eur. pl. 401.

a. Pembrokeshire. From Col. Montagu's collection.
b. Scotland. Young. From Col. Montagu's collection.

e-e. North of Scotland. Young. From Mr. Bullock's collection.

9-j. Craigs of Hoy, Orkney. From Mr. J. Baker's collection.

k. Sternum. England.

1. Sternum. England. Presented by John Ray, Esq.

# 2. FRATERCULA.

Fratercula, Briss. Ornith. vi. p. 81 (1760). Larva, Vieill. Analyse, §c., p. 67 (1811). Mormon, Illig. Prodr. Mam. § Av. p. 283 (1811). Lunda, Pall. (17??). Gymnoblepharum, Brandt, Descr. et Icon. (1836). Ceratoblepharum, Brandt, Descr. et Icon. (1836).

# a. FRATERCULA.

# 1. FRATERCULA ABOTICA. The Puffin.

Alea arctica, Linn. S. N. i. p. 211; Brünn. Orn. Bor. p. 23. Mormon fratercula, Temm. Man. d'Orn. 1815, p. 614; Brehm, Vog. Deuts. p. 997.

Mormon arcticus, Macgill. Man. N. H. Ornith. ii. p. 218; Pr. Bonap. Geogr. Comp. List. of B. p. 66; Schleg. Rev. Crit. des

Ois. d Eur. p. 108.

Alca labradora, Gmel. S. N. i. p. 550.

Alca canogularis, Meyer, Taschenb. Deuts. ii. p. 442.

Alca deleata, Briinn. Orn. Bor. p. 25.

Mormon polaris, Brehm, Vög. Deuts. p. 998.

Mormon grabæ, Brehm, Vög. Deuts. p. 999, t. 46, f. 1.

Lunda arctica, Pall. Zoogr. ii. p. 365; Keys. & Bl. Wirbelth. Eur. p. 92; Naum. Vög. Deuts. (1844) xii. p. 577, t. 335.

Fratercula arctica, Illig. Prod. p. 284; Leach, Syst. Cat. Mam. & B. B. M. p. 42; Flem. Brit. An. p. 130; Jenyns, Man. B. Vert. An. p. 260; Eyton, Cat. Brit. B. p. 49; G. R. Gray, Gen. of B. iii. p. 637.

Puffin, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 168, fig.;

Yarr. Brit. B. 2 edit. iii. p. 469, fig.

Common Puffin, Selby, Brit. Orn. ii. p. 439. Puffin Auk, Penn. Brit. Zool. (1812) ii. p. 152.

Pl. enl. 275; Gould, B. of Eur. pl. 403.

a. Pembrokeshire. From Col. Montagu's collection.

b. Great Britain.

c. d. Scilly Islands. Presented by D. W. Mitchell, Esq.

e. Great Britain. Young. From Mr. Bullock's collection.

f. Scilly Islands. Very young. Presented by D. W. Mitchell,
Esq.

g. Ferroe. Presented by T. Frank, Esq.

h, i. Craigs of Hoy, Orkney. Very young. From Mr. J. Baker's collection.

# ii. URINÆ.

### 1. URIA.

Uria, Mæhr. Av. Gen. p. 67 (1752). Grylle, Brandt, Descr. et Icon. (1836). Cataractes, Mæhr. Avium Gen. p. 68 (1752). Lomvia, Brandt, Descr. et Icon. (1836).

#### a. URIA.

# 1. URIA TROILE. The Common Guillemot.

Colymbus troile, Linn. S. N. i. p. 220. Uria troile, Lath. Ind. Orn. ii. p. 796; Brünn. Orn. Bor. p. 27; Temm. Man. d'Orn. 1815, p. 606; Leach, Syst. Cat. Mam. & B. B. M. p. 42; Boie, Isis (1822), p. 562; Steph. Gen. Zool. xii. p. 244, pl. 62; Flem. Brit. An. p. 134; Brehm, Vög. Deuts. p. 981; Jenyns, Man. B. Vert. An. p. 258; Eyton, Cat. Brit. B. p. 49; Pr. Bonap. Geogr. Comp. List of B. p. 64; Schleg. Rev. Crit. des Ois. d'Eur. p. 107; Macgill. Man. N. H. Ornith. ii. p. 212; G. R. Gray, Gen. of B. iii. p. 645.

Cepphus lomvia, Pall. Zoogr. ii. p. 345.

Uria Iomvia, Brünn, Orn. Bor. p. 27; Keys. & Bl. Wirbelth. Eur. p. 92; Naum. Vög. Deuts. (1844) xii, p. 508, t. 331.

Uria suarbag, Brunn. Orn. Bor. p. 27. Colymbus minor, Gmel. S. N. i. p. 591.

Uria minor, Steph. Gen. Zool. xii. p. 246, pl. 63.

Uria norwegica, Brehm, Vog. Deuts. p. 933.

Foolish Guillemot, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 160; Selby, Brit. Orn. ii. p. 420.

Guillemot, Bew. Brit. B. (1804) ii. p. 175, fig.

Lesser Guillemot, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 177, fig.

Common Guillemot, Yarr. Brit. B. 2 edit. iii. p. 450, fig. Pl. enl. 903; Gould, B. of Eur. pl. 396.

a, b. Great Britain.

e, d. Great Britain. From Col. Montagu's collection.

e. Devonshire. From Col. Montagu's collection.

f-h. Craigs of Hoy, Orkney. Very young. From Mr. J. Baker's collection.

i. Sternum. England. Presented by T. Ingall, Esq. j. Skull. England. Presented by John Ray, Esq.

# ?2 URIA RINGVIA. The Ringed Guillemot.

Uria leucophthalmos, Faber, Prodr. p. 42.

Uria ringvia, Brunn, Orn. Bor. p. 27.

Uria hringvia, Keys. § Bl. Wirbelth. Eur. p. 93; Naum. Vög. Deuts. (1844) xii. p. 524, t. 332; G. R. Gray, Gen. of B. iii. p. 645.

Uria troile (pt.), Temm. Man. d'Orn. 1815, p. 607.

Uria lacrymans, Valenc. Chloris, Voy. pl. xxiii.; Temm. Man. d'Orn. (1840) iv. p. 574.

Uria lencopsis, Brehm, Vög. Deuts. p. 982.

Alea s. Colymbus Laugvigia, Dlaff. Reise n. Isl. d. 562, t. 21.

Uria troile leucophthalmos, Schleg. Rev. Crit. des Ois, d'Eur. p. 107.

Uria alga, Brünn. Orn. Bor. p. 28.

Ringed Guillemot, Yarr. Brit. B. 2 edit. iii. p. 458, fig.

Gould, B. of Eur. pl. 397.

(Wales).

#### 3. URIA BRUNNICHII. Brünnich's Guillemot.

Uria Brunnichii, Sabine, Linn. Trans. xii. p. 538; Temm. Man. d'Orn. (1820) p. 924; Boie, Isis (1822), p. 562; Flem. Brit. An. p. 134; Brehm, Vög. Deuts. p. 984; Jenyns, Man. B. Vert. An. p. 258; Pr. Bonap. Geogr. Comp. List of B. p. 65; Schleg. Rev. Crit. des Ois. d'Eur. p. 106; Macgill. Man. N. H. Ornith. ii. p. 212; G. R. Gray, Gen. of B. iii. p. 645.
Uria Francsii, Leach, Linn. Trans. xii. p. 588; Steph. Gen. Zool. xii. p. 243.
Cepphus arra, Pall. Zoogr. ii. p. 347.
Uria Troile, Brünn. Orn. Bor. p. 27.
Uria polaris, Brehm, Vög. Deuts. p. 984.
Uria pica, Fab. Faun. Grænl. p. 79.
Uria arra, Keys. & Bl. Wirbelth. Eur. p. 92; Naum. Vög. Deuts. (1844) xii. p. 535, t. 333.
Alca Lomvia, Linn. S. N. 10 edit. p. 130.
Brunnich's Guillemot, Yarr. Brit. B. 2 edit. iii. p. 455, fig.

(Coast of Kerry and Shetland Islands).

Cephus arcticus, Brehm, Vög. Deuts. p. 988.

Gould, B, of Eur. pl. 398.

### b. GRYLLE.

# 4. URIA GRYLLE. The Black Guillemot.

Colymbus grylle, Linn. S. N. i. p. 220. Uria grylle, Lath. Ind. Orn. ii. p. 797; Temm. Man. d'Orn. 1815, p. 608; Leach, Syst. Cat. Mam. & B. M. p. 42; Jenyns, Man. B. Vert. An. p. 258; Eyton, Cat. Brit. B. p. 49; Pr. Bonap. Geogr. Comp. List of B. p. 65; Keys. & Bl. Wirbelth. Eur. p. 92; Schleg. Rev. Crit. des Ois. d'Eur. p. 107; Macgill. Man. N. H. Ornith. ii. p. 213; G. R. Gray, Gen. of B. iii. p. 645. Colymbus lacteolus, Gmel. S. N. i. p. 583. Uria lacteola, Lath. Ind. Orn. ii. p. 798. Uria balthica, Brünn. Orn. Bor. p. 28. Uria grylloides, Brünn. Orn. Bor. p. 28. Uria scapularis, Steph. Gen. Zool. xii. p. 250, pl. 64. Cepphus lacteolus, Pall. Spic. Zool. v. p. 33. Cepphus columba, Pall. Zoogr. ii. p. 348. Cephus grylle, Boie, Isis (1822), p. 562; Flem. Brit. An. p. 134; Brehm, Vog. Deuts. p. 987; Naum. Vog. Deuts. (1844) xii, p. 461, t. 330.

Cephus Meisneri, Brehm, Vög. Deuts. p. 989. Cephus Faerroeensis, Brehm, Vög. Deuts. p. 990.

Cephus glacialis, Brehm, Vog. Deuts. p. 991?

Grylle columba, Pr. Bonap. Geogr. Comp. List of B. p. 82.

Black Guillemot, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 179, fig.; Penn. Brit. Zool. (1812) ii. p. 163; Selby, Brit. Orn. ii. p. 426; Yarr. Brit. B. 2 edit. iii. p. 462, fig.

Spotted Guillemot, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p.

181.

Gould, B. of Eur. pl. 399.

a-d. Orkney Islands. From Mr. Bullock's collection.

e. Great Britain. Young. From Col. Montagu's collection.

f. Great Britain. Young.

g-i. Craigs of Hoy, Orkney. Very young. From Mr. J. Bakers collection.

j. Craigs of Hoy. Adult. From Mr. J. Baker's collection.
h. Craigs of Hoy. Young. From Mr. J. Baker's collection.

L. Leadenball Market. From Mr. J. Baker's collection.

### 2. ARCTICA.

Arctica, Mahr. Av. Gen. p. 65 (1752). Mergulus, Vieill. Analyse, &c., p. 67 (1816).

# I. ARCTICA ALLE. The Little Auk.

Alca alle, Linn. S. N. i. p. 211.

Uria alle, Temm, Man. dOrn. 1815, p. 611.

Arctica alle, G. R. Gray, List of Gen. of B. (1841) p. 98; Gen.

of B. iii. p. 645.

Mergulus melanoleucos, Leach, Syst. Cat. Mam. & B. B. M. p. 42; Steph. Gen. Zool. xiii. p. 34, pl. 3; Flem. Brit. An. p. 135; Eyton, Cat. Brit. B. p. 49.

Alca candida, Brunn. Orn. Bor. p. 26.

Mergulus alle, Vieill., Boie, Isis (1822), p. 562; Brehm, Vög. Deuts. p. 993; Jenyns, Man. B. Vert. An. p. 259; Pr. Bonap. Geogr. Comp. List of B. p. 65; Keys. & Bl. Wirbelth. Eur. p. 92; Naum. Vög. Deuts. (1844) xii. p. 552, t. 334; Schleg. Rev. Crit. des Ois. d'Eur. p. 108; Macgill, Man. N. H. Ornith. ii. p. 215.

Mergulus arcticus, Brehm, Vog. Deuts. p. 994.

Little Auk, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 172, fig. : Penn. Brit. Zool. (1812) ii. p. 158; Yarr. Brit. B. 2 edit. ii. p. 465, fig. Common Rotche, Selby, Brit. Orn. ii. p. 430. Pl. enl. 917; Gould, B. of Eur. pl. 402.

- a. Devonshire. Male. From Col. Montagu's collection.
- b. Great Britain. Presented by J. Engleheart, Esq.
- c. Orkney Islands. Female.
- d. Orkney Islands. Young.

### FAM. IV. PROCELLARIDÆ.

### i. PROCELLARINÆ.

### 1. PUFFINUS.

Puffinus, Briss. Ornith. vi. p. 130 (1760). Thiella, Gloger (1827). Nectris, Kuhl. (1820). Cymotomus, Macgill. Man. N. H. Ornith. ii. p. 13 (1842).

### 1. PUFFINUS MAJOR. The Greater Shearwater.

Procellaria puffinus, Linn. S. N. i. p. 213; Temm. Man. d'Orn. (1820) p. 805; Jenyns, Man. B. Vert. An. p. 284.

Procellaria cinerea, Gmel. S. N. i. p. 563.

Puffinus cinereus, Steph. Gen. Zool. xiii. p. 227; Eyton, Cat. Brit. B. p. 50; Temm. Man. d'Orn. (1840) iv. p. 506.

Puffinus puffinus (Cuv.), Boie, Isis (1822), p. 562.

Nectris cinerea, Keys. & Bl. Wirbelth. Eur. p. 94.

Puffinus major, Faber, Prodr. p. 56; Temm. Man. d'Orn. (1840) iv. p. 507; G. R. Gray, Gen. of B. iii. p. 647.

Puffinus arcticus, Macgill. Man. N. H. Ornith. ii. p. 262.

Cymotomus arcticus, Macgill. Man. N. H. Ornith. ii. p. 13.

Puffinus fuliginosus, Kuhl, Beitr. p. (?); A. Strickl. Proc. Zool. S. 1832, p. 129; Eyton, Cat. Brit. B. p. 50.

Procellaria fuliginosa, Forst. Descr. Mam. p. (?) non Gmel.; Jenyns, Man. B. Vert. An. p. 285.

Procellaria major (pt.), Temm. Man. d'Orn. (1840) iv. p. 509.

Nectris fuliginosa, Soland. MSS.; Keys. & Bl. Wirbelth. Eur.

Cinereous Shearwater, Selby, Brit. Orn. ii. p. 528; Eyton, Hist. R. Brit. B. p. 49, fig.

Greater Shearwater, Yarr. Brit. B. 2 edit. iii. p. 624, fig.

Dusky Shearwater, Eyton, Hist. R. Brit. B. p. 51, fig. Gould, B. of Eur. pl. 445, f. 1, 2.

a. Polperro, Cornwall. Presented by D. W. Mitchell, Esq.
 b—d. Craigs of Hoy. Very young. From Mr. J. Baker's collection.

# 2. PUFFINUS ANGLORUM. The Manx Shearwater.

Procellaria puffinus, Brünn. Orn. Bor. p. 29; Lath. Ind. Orn. ii.

p. 824; Leach, Syst. Cat. Mam. & B. B. M. p. 41.

Puffinus anglorum (Ray), Boie, Isis (1822) p. 562; Steph. Gen. Zool. xiii. p. 226, pl. 26; Flem. Brit. An. p. 137; Brehm, Vog. Deuts. p. 807; Jenyns, Man. B. Vert. An. p. 285; Eyton, Cat. Brit. B. p. 50; Macgill. Man. N. H. Ornith. ii. p. 262; G. R. Gray, Gen. of B. iii. p. 647.

Procellaria anglorum, Temm. Man. d'Orn. (1820) ii. p. 806.

Nectris puffinus, Keys. & Bl. Wirbelth. Eur. p. 94.

Cymotomus anglorum, Macgill. Man. N. H. Ornith. ii. p. 13.

Puffinus arcticus, Faber, Prodr. p. 56; Brehm, Vög. Deuts. p. 806,
 t. 39, f. 4; Naum. Vög. Deuts. (1840) x. p. 618, t. 277; Schleg.
 Rev. Crit. des Ois. d'Eur. p. 132.

Shearwater, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 246, fig.;

Penn. Brit. Zool. (1812) ii. p. 206.

Manks Shearwater, Selby, Brit. Orn. ii. p. 529.

Manx Shearwater, Yarr. Brit. B. 2 edit. iii. p. 631, fig.

Edw. Birds, pl. 359; Gould, B. of Eur. pl. 443.

a. British Sea. From Col. Montagu's collection.

b. Scilly Islands. Adult male. Presented by D. W. Mitchell. Esq.

c. Scilly Islands. Adult female. Presented by D. W. Mitchell, Esq.

# 3. Puffinus obscurus. The Dusky Shearwater.

Procellaria obscura, Gmel. S. N. i. p. 559; Temm. Man. d'Orn. ii. p. 808.

Puffinus obscurus, Kuhl, Beitr. t. 11, f. 11; Macgill. Man. N. H. Ornith. ii. p. 263.

Cymotomus obscurus, Macgill. Man. N. H. Ornith. ii. p. 13. Nestris obscura, Keys. & Bl. Wirbelth. Eur. p. 94.

(" Sometimes been found far north," Macgill,)

#### 2. THALASSIDROMA.

Thalassidroma, Vigors, Zool. Journ. 1825, p. 405. Procellaria, Mahr. Av. Gen. p. 67 (1752). Hydrobates, Boie, Isis (1822), p. 562. Oceanites, Keys. & Bl. Wirbelth. Eur. p. 93 (1840). Bulweria, Pr. Bonap. (1842).

### a. Bulweria.

#### 1. THALASSIDROMA BULWERI. Bulwer's Petrel.

Procellaria Bulwerii, Jard. & Selby, Illustr. of Ornith. pl. 65. Procellaria anjinko, Heik.

Procellaria (Puffinus) columbina, Webb & Berth. Voy. Canar. t. 4, f. 2.

Thalassidroma? Bulweri, Gould, B. of Eur. pl. 448; Keys. & Bl. Wirbelth. Eur. p. 93; Schleg. Rev. Crit. des Ois. d'Eur. p. 134; Macgill. Man. N. H. Ornith. ii. p. 264; G. R. Gray, Gen. of B. iii. p. 648.

Bulwer's Petrel, Yarr. Brit. B. 2 edit. iii. p. 636, fig.

Gould, B. of Eur. pl. 448.

(Banks of the Ure, Yorkshire).

# b. Thalassidroma.

# 2. THALASSIDROMA PELAGICA. The Stormy Petrel.

Procellaria pelagica, Linn. S. N. i. p. 212; Temm. Man. d'Orn. 1815, p. 519; Leach, Syst. Cat. Mam. & B. B. M. p. 41; Steph. Gen. Zool. xiii. p. 220; Flem. Brit. An. p. 135; Jenyns, Man. B. Vert. An. p. 285.

Hydrobates pelagica, Boie, Isis (1822), p. 562; Brehm, Vög. Deuts. p. 804.

Hydrobates Farroeensis, Brehm, Vög. Deuts. p. 803.

Thalassidroma pelagica, Vigors, Zool. Journ. ii. p. 405; Selby, Brit. Orn. ii. p. 533; Eyton, Cat. Brit. B. p. 51; Temm. Man. d'Orn. (1840) iv. p. 514; Keys. § Bl. Wirbelth. Eur. p. 93; Naum. Vög. Deuts. (1840) x. p. 557, t. 275; Schleg. Rev. Crit. des Ois. d'Eur. p. 133; Macgill. Man. N. H. Ornith. ii. p. 266; G. R. Gray, Gen. of B. iii. p. 648.

Thalassidroma melitensis, Schemb, Cat. Orn. del Grappo di Malta, p. 118.

Stormy Petrel, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 249, fig.; Penn. Brit. Zool. (1812) ii. p. 208.

Common Storm Petrel, Selby, Brit. Orn. ii. p. 533. Storm Petrel, Yarr. Brit. B. 2 edit. iii. p. 647, fig.

Gould, B. of Eur. pl. 477, f. 2.

a-c. British Channel.

d. British Channel. Presented by J. Gould, Esq.

e. Shetland Islands. Male. From Mr. J. Baker's collection,
f. Shetland Islands. Female. From Mr. J. Baker's collection,
g—i. Three sterna. England. Presented by John Ray, Esq.

### 3. THALASSIDROMA LEAGHIL. The Forked-tailed Petrel.

Procellaria Leachii, Temm. Man. d'Orn. (1820) ii. p. 812; Steph. Gen. Zool. xiii. p. 219, pl. 25; Jenyns, Man. B. Vert. An. p. 286.

Hydrobates Leachii, Boie, Isis (1822), p. 562.

Thalassidroma Leachii, Keys. & Bl. Wirbelth. Eur. p. 93; Naum. Vög. Deuts. (1840) x. p. 575, t. 275, f. 2; Temm. Man. d'Orn. (1840) iv. p. 512; Schleg. Rev. Crit. des Ois. d'Eur. p. 133; Macgill. Man. N. H. Ornith. ii. p. 265; G. R. Gray, Gen. of B. iii. p. 648.

Procellaria Bullockii, Flem. Brit. An. p. 136.

Thalassidroma Bullockii, Selby, Brit. Orn. ii. p. 537; Eyton, Cat. Brit. B. p. 51.

Fork-tailed Storm Petrel, Selby, Brit. Orn. ii. p. 537. Forked-tailed Petrel, Yarr. Brit. B. 2 edit. iii. p. 643, fig.

Gould, B. of Eur. pl. 477, f. 1.

u. St. Kilda. From Mr. Bullock's collection.

#### C. OCEANITES.

# 4. THALASSIDEOMA OCEANICA. Wilson's Petrel.

Procellaria Wilsoni, Pr. Bonap. Syn. B. of Amer. p. 367; Jenyns, Man. B. Vert. An. p. 286.

Procellaria pelagica, Wils. Amer. Orn. vii. p. 90, pl. 60, f. 6. Oceanites Wilsoni, Keys. & Bl. Wirbelth. Eur. p. 93.

Thalassidroma Wilsonii, Pr. Bonap. Journ. Phil. ix. t. viii. f. 3, 3 a; Temm. Man. d'Orn. (1840) iv. p. 512; Macgill. Man. N. H. Ornith. ii. p. 265. Procellaria oceanica, Kuhl, Beitr. Zool. t. 10, f. 1; Lichtenb. Cat. Dupl. Berl. Mus. p. 83.
Thalassidroma oceanica, G. R. Gray, Gen. of B. iii. p. 648.
Wilson's Petrel, Yarr. Brit. B. 2 edit. iii. p. 639, fig. Pl. enl. 993.

(British Channel).

#### 3. PROCELLARIA.

Procellaria, Linn. S. N. (1748). Fulmarus, Leach, Steph. Gen. Zool. xiii. p. 233 (1826). Rhantistes, Kaup, Naturl. Syst. der Eur. Thier. p. 105 (1829). Daption, Steph. Gen. Zool. xiii. p. 239 (1825). Ossifraga, Homb. & Jacq. (1844). Priofinus, Homb. & Jacq. (1844).

### a. Procellaria.

### 1. PROCELLARIA GLACIALIS. The Fulmar Petrel.

Procellaria glacialis, Linn. S. N. i. p. 213; Temm. Man. d'Orn. 1815, p. 518; Boie, Isis (1822), p. 562; Flem. Brit. An. p. 135; Brehm, Vög. Deuts. p. 799; Flem. Brit. An. p. 284; Keys. & Bl. Wirbelth. Eur. p. 94; Naum. Vög. Deuts. (1840) x. p. 589, t. 276; Schleg. Rev. Crit. des Ois. d'Eur. p. 132; Macgill. Man. N. H. Ornith. ii. p. 260; G. R. Gray, Gen. of B. iii. p. .

Fulmarus glacialis, Steph. Gen. Zool. xiii. p. 234, pl. 27; Eyton, Cat. Brit. B. p. 50.

Procellaria hiemalis, Brehm, Vög. Deuts. p. 800.

Rhantistes glacialis, Kaup, Naturl. Syst. p. 105.

Fulmar or Fulmer, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 243, fig.

Fulmar Petrel, Penn. Brit. Zool. (1812) ii. p. 203, pl.; Selby, Brit. Orn. ii. p. 525; Yarr. Brit. B. 2 edit. iii. p. 619, fig. Pl. enl. 59; Gould, B. of Eur. pl. 446.

a. St. Kilda.

b. Orkney Islands. Young. From Mr. Bullock's collection.

# FAM. V. LARIDÆ.

# i. LARINÆ.

# 1. STERCORARIUS.

Stercorarius, Briss. Orn. vi. p. 149 (1760). Catharacta, Brünn. Orn. p. 32. (1764). Lestris, Illig. Prod. Mam. & Av. p. 272 (1811). Prædatrix, Vieill. Analyse, &c. (1816) p. 65. Buphagus, Mahr. Av. Gen. p. 66 (1752).

### 1. STERCORARIUS CATARRHACTES. The Common Skua.

Larus catarractes, Linn. S. N. i. p. 226. Cutaractes vulgaris, Flem. Brit. An. p. 137. Catarracta skua, Retz, Faun. Suec. p. 161. Catharacta skua, Brünn. Orn. Bor. p. 125.

Catarractes skua, Steph. Gen. Zool. xiii. p. 215; Macgill. Man. N.

H. Ornith, ii, p. 255.

Lestris catarractes, Ill. Prod. p. 272; Temm. Man. d'Orn. 1815, p. 511; Boie, Isis (1822), p. 562; Brehm, Vög. Deuts. p. 715; Jenyns, Man. B. Vert. An. p. 280; Eyton, Cat. Brit. B. p. 51; Keys. & Bl. Wirbelth. Eur. p. 94; Naum. Vög. Deuts. (1840) x. p. 470, t. 270; Schleg. Rev. Crit. des Ois. d'Eur. p. 134.

Catarracta fusca, Leach, Syst. Cat. Mam. & B. B. M. p. 40.

Lestris skua, Brehm, Vög. Deuts. p. 716.

Stereorarius catarrhactes, G. R. Gray, Gen. of B. iii. p. 653. Skua Gull, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 233,

fig. ; Penn. Brit. Zool. (1812) ii. p. 174.

Common Skua, Selby, Brit. Orn. ii. p. 514; Yarr. Brit. B. 2 edit. iii. p. 602, fig.

Gould, B. of Eur. pl. 439.

a. Devonshire. From Col. Montagu's collection.

b. Young. Presented by J. Franco, Esq.c. Young. From Mr. Bullock's collection.

# 2. STERCORARIUS POMARINUS. The Pomarine Skua.

Lestris pomarivus, Temm. Man. d'Orn. 1815, ii. p. 514; Boie, Isis (1822), p. 562; Jenyns, Man. B. Vert. An. p. 281; Keys. & Bl. Wirbelth. Eur. p. 94; Naum. Vög. Deuts. (1840) x. p. 487, t. 271; Schleg, Rev. Crit. des Ois. d'Eur. p. 134.

Catarractes pomarina, Steph. Gen. Zool. xiii. p. 216, pl. 24; Macgill. Man. N. H. Ornith. ii. p. 256.
Lestris striatus (Briss.), Eyton, Cat. Brit. B. p. 51.
Lestris sphæriuros, Brehm, Vög. Deuts. p. 718.
Larus parasiticus, Wolf und Meyer, Taschenb. ii. p. 490.
Catarractes parasita, var. camtschatica, Pall. Zoogr. ii. p. 312.
Stercorarius pomarinus, G. R. Gray, Gen. of B. iii. p. 653.
Pomarine Skua, Selby, Brit. Orn. ii. p. 517; Eyton, Hist. R. Brit. B. p. 53, fig.; Yarr. Brit. B. 2 edit. iii. p. 606, fig. Gould, B. of Eur. pl. 440.

a. North Britain. Young. From Mr. Bullock's collection.

#### 3. STERCORARIUS PARASITICUS. The Arctic Skua.

Larus parasiticus, Linn. S. N. i. p. 226. Lestris parasitica, Temm. Man. d'Orn. (1820) ii. p. 797; Boie, Isis (1822), p. 562; Brehm, Vög. Deuts. p. 722; Keys. & Bl. Wirbelth. Eur. p. 95; Naum. Vog. Deuts. (1840) x. p. 510, t. 272, Lestris Richardsoni, Swains. Fauna Bor. Amer. ii. p. 433, pl. 73; Temm. Man. d'Orn. (1840) p. 499; Eyton, Cat. Brit. B. p. 51. Larus crepidatus, Gmel. S. N. i. p. 602. Lestris crepidatus, Temm. Man. d'Orn. 1815, p. 515. Catharacta coprotheres, Brünn. Orn. Bor. p. 38. Catharacta parasitica, Retz. Faun. Suec. p. 160; Brünn. Orn. Bor. p. 37. Cataracta cepphus, Leach, Syst. Cat. Mam. & B. B. M. p. 39. Cataractes parasita, Pall. Zoogr. ii. p. 310. Catarractes parasiticus, Flem. Brit. An. p. 138. Stercorarius parasiticus, G. R. Gray, Gen. of B. iii. p. 653. Stercorarius cepphus, Steph. Gen. Zool. xiii. p. 211, pl. Lestris Boji, Brehm, Vög. Deuts. p. 719. Lestris Schleepii, Brehm, Vog. Deuts. p. 720. Lestris Benickii, Brehm, Vog. Deuts. p. 723, t. 37, f. 1. Cataractes Richardsonii, Macgill. Man. N. H. Ornith. ii. p. 267. Arctic Gull, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 239; Penn. Brit. Zool. (1812) ii. p. 179, pl. 32. Arctic Skua, Selby, Brit. Orn. ii. p. 520. Black-toed Gull, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 236, fig.; Penn. Brit. Zool. (1812) ii. p. 178, pl. 31, low. fig. Richardson's Skua, Yarr. Brit. B. 2 edit. iii. p. 611, fig. Pl. enl. 762; Gould, B. of Eur. pl. 441.

a. Brighton. Young.

b. Hills of Hoy, Orkney. Young. From Mr. J. Baker's collection.

c. Hills of Hoy, Orkney. Male. From Mr. J. Baker's collection.
d. Hills of Hoy, Orkney. Female. From Mr. J. Baker's collec-

tion.

e. Hills of Hoy, Orkney. Very young. From Mr. J. Baker's collection.

### 4. STERCORARIUS CEPPHUS. Buffon's Skua.

Lestris Buffonii, Boie, Isis (1822), p. 562; Meyer, Taschenb. iii. p.

212; Schleg. Rev. Crit. des Ois. d'Eur. p. 135.

Lestris parasilicus? Swains. Faun. Bor. Amer. p. 430; Temm. Man. d Orn. (1840) p. 502; Jenyns, Man. B. Vert. An. p. 283; Eyton, Cat. Brit. B. p. 52.

Stercorarius cepphus, G. R. Gray, Gen. of B. iii. p. 653.

Catharacta cepphus, Brunn. Orn. Bor. p. 36; Keys. & Bl. Wirbelth. Eur. p. 95.

Cataractes parasitica, Pall. Zoogr. ii. p. 310.

Lestris crepidata, Brehm, Vog. Deuts. p. 724; Naum. Vog. Deuts.

(1840) x. p. 534, t. 274.

Cataractes longicaudatus, Macgill. Man. N. H. Ornith. ii. p. 258.
Arctic Jager, Steph. Gen. Zool. xiii. pl. 23; Eyton, Hist. R. Brit.
B. p. 55, fig.

Buffon's Skua, Yarr. Brit. B. 2 edit. iii. p. 616, fig. Edwards, Birds, pl. 148; Gould, B. of Eur. pl. 442.

a. Orkney Islands. From Col. Montagu's collection.

# 2. RHODOSTETHIA.

Rhodostethia, Macgill. Man. N. H. Ornith. ii. p. 252 (1842). Rossia, Pr. Bonap. Geogr. Comp. List of B. p. 62 (1838).

# 1. Rhodostethia Rossii. Cuneate-tailed Gull.

Larus roseus, Jard. & Selby, Illustr. of Ornith. pl. 14; Keys, & Bl.

Wirbelth, Eur. p. 95.

Larus Rossii, Richardson, Parry, 2nd Voy. App. p. 359; Schleg. Rev. Crit. des Ois. d'Eur. p. 128; Milner, in Zoologist, 1847, p. 1694; Charlesworth, in Zoologist, 1847, p. 1782. Rossia rosea, Pr. Bonap. Geogr. Comp. List of B. p. 62. Rhodostethia Rossi, Macgill. Man. N. H. Ornith. ii. p. 253; G. R. Gray, Gen. of B. iii. p. 653.

Wils. Illstr. of Ornith. pl. 8.

(Yorkshire and Ireland).

#### 3. LARUS.

Larus, Linn. S. N. (1735).
Gavia, Mæhr. Av. Gen. p. 66 (1752).
Leucus, Kaup, Naturl. Syst. der Eur. Thier. p. 86 (1829).
Laroides, Brehm, Vög. Deuts. p. 737 (1831).
Chroicocephalus, Eyton, Cat. Brit. B. p. 53 (1836).
Chrœcocephalus, Strickl.
Ichthyaëtus, Kaup, Naturl. Syst. der Eur. Thier. p. 102 (1829).
Hydrocolæus, Kaup, Naturl. Syst. der Eur. Thier. p. 113 (1829).

### a. LEUCUS.

#### 1. LARUS GLAUCUS. The Glaucous Gull.

Larus glaucus, Brünn. Orn. Bor. p. 44; Sabine, Linn. Trans. xii. p. 757; Temm. Man. d'Orn. (1820) ii. p. 757; Boie, Isis (1822), p. 562; Steph. Gen. Zool. xiii. p. 189; Flem. Brit. An. p. 139; Jenyns, Man. B. Vert An. p. 279; Eyton, Cat. Brit. B. p. 53; Brehm, Vög. Deuts. p. 733; Naum. Vög. Deuts. (1840) x. p. 350, t. 264; Keys. & Bl. Wirbelth. Eur. p. 96; Schleg. Rev. Crit. des Ois. d'Eur. p. 125; Macgill. Man. N. H. Ornith. ii. p. 247; G. R. Gray, Gen. of B. iii. p. 654.

Larus glacialis, Benicke, Macgill. Wern. Trans. v. p. 270; Brehm, Vog. Deuts. p. 732.

Larus giganteus, Benicke.

Larus consul, Boie, Wied. Zool. Mag. i. p. 757; Brehm, Vög. Deuts. p. 735.

Leucus glaucus, Kaup, Naturl. Syst. p. 86.

Iceland Gull, Edmondst. Wern. Trans. iv. p. 176, 503.

Glaucous Gull, Selby, Brit. Orn. ii. p. 498; Yarr. Brit. B. 2 edit. iii. p. 595, fig.

Gould, B. of Eur. pl. 432.

- a. Shetland Islands.
- b. Great Britain. Young. From Mr. Bullock's collection.
- c. Orkney Islands.

### 2. LARUS LEUCOPTERUS. The Iceland Gull.

Larus leucopterus, Faber, Prodr. Isl. Orn. p. 91; Rich. & Swains. Fauna Bor. Amer. p. 418; Eyton, Cat. Brit. B. p. 53; Temm. Man. d'Orn. (1840) iv. p. 467; Naum. Vög. Deuts, (1840), x. p. 367, t. 265; Keys. & Bl. Wirbelth. Eur. p. 96; Schleg. Rev. Crit. des Ois. d'Eur. p. 125; Macgill. Man. N. H. Ornith. ii. p. 247; G. R. Gray, Gen. of B. iii. p. 654.

Larus argentatus, Sabine, Linn. Trans. xii. p. 546. Larus glaucoides, Temm., Boie, Isis (1822), p. 562.

Larus arcticus, Macgill. Wern. Trans. v. p. 268.

Larus islandicus, Edmonst. Wern. Trans. iv. p. 506; Flem. Brit. An. p. 139; Jenyns, Man. B. Vert. An. p. 279.

Larus minor, Brehm, Vög. Deuts. p. 736, t. 37, f. 2. Laroides glaucoides, Brehm, Vög. Deuts. p. 744. Laroides leucopterus, Brehm, Vög. Deuts. p. 745.

Laroides subleucopterus, Brehm, Vög. Deuts. p. 746.

Iceland Gull, Selby, Brit. Orn. ii. p. 501; Eyton, Hist. R. Brit. B. p. 59; Yarr. Brit. B. 2 edit. iii. p. 575, fig.

Gould, B. of Eur. pl. 433.

(Shetland, Frith of Forth, and Coast of England).

# 3. LARUS MARINUS. The Great Black-backed Gull.

Larus marinus, Linn, S. N. i. p. 225; Temm, Man, d'Orn. 1815, p. 490; Boie, Isis (1822), p. 562; Steph. Gen. Zool. xiii. p. 186; Flem. Brit. An. p. 140; Brehm, Vög. Deuts. p. 731; Jenyns, Man. B. Vert. An. p. 278; Eyton, Cat. Brit. B. p. 53; Naum. Vög. Deuts. (1840) x. p. 439, t. 268, 269; Keys. § Bl. Wirbelth. Eur. p. 97; Schleg. Rev. Crit. des Ois. d'Eur. p. 124; Macgill. Man. N. H. Ornith. ii. p. 244; G. R. Gray, Gen. of B. iii. p. 654.

Larus maximus, Leach, Syst. Cat. Mam. & B. B. M. p. 40; Brehm, Vög. Deuts. p. 728.

Larus Mulleri, Brehm, Vög. Deuts. p. 729. Larus Fabricii, Brehm, Vög. Deuts. p. 730. Leucus marinus, Kaup, Naturl. Syst. p. 86.

Great Black-backed Gull, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 212, fig.; Selby, Brit. Orn. ii. p. 507; Yarr. Brit. B. 2 edit. iii. p. 591, fig.

Wagel, Mont. Orn. Dict; Bew. Brit. B. (1804) ii. p. 216, fig.

Wagel Gull, Penn. Brit. Zool. (1812) ii. p. 182. Pl. enl. 266, 990; Gould, B. of Eur. pl. 430.

a. Carmarthen. From Col. Montagu's collection.

b. Carmarthen. From Col. Montagu's collection.

- c. Scilly Islands. Young. Presented by D. W. Mitchell, Esq.
- d. Great Britain. Male. From Mr. J. Baker's collection.
- e. Great Britain. Female. From Mr. J. Baker's collection.
- f. Great Britain. Young male. From Mr. J. Baker's collection.
- g. Sternum. England. Presented by John Ray, Esq.
- h. Skull. England. Presented by John Ray, Esq.

#### 4. Larus fuscus. The Lesser Black-backed Gull.

Larus fuscus, Linn. S. N. i. p. 225; Temm. Man. d'Orn. 1815, p. 496; Boie, Isis (1822), p. 563; Steph. Gen. Zool. xiii. p. 194; Flem. Brit. An. p. 140; Jenyns, Man. B. Vert. An. p. 277; Eyton, Cat. Brit. B. p. 53; Naum. Vög. Deuts. (1840) x. p. 419, t. 267; Keys. & Bl. Wirbelth. Eur. p. 97; Schleg. Rev. Crit. des Ois. d'Eur. p. 124; G. R. Gray, Gen. of B. iii. p. 654. Larus flavipes, Meyer, Taschenb. ii. p. 469; Temm. Man. d'Orn. (1840) iv. p. 471; Macgill, Man. N. H. Ornith. ii. p. 245. Larus cinereus, Leach, Syst. Cat. Mam. & B. B. M. p. 40? Laroides melanotus, Brehm, Vög. Deuts. p. 747. Laroides harengorum, Brehm, Vog. Deuts. p. 748. Laroides fuscus, Brehm, Vog. Deuts. p. 749. Leucus fuscus, Kaup, Naturl. Syst. p. 86. Less Black-backed Gull, Mont. Orn. Dict. Lesser Black-backed Gull, Selby, Brit. Orn. ii. p. 509; Yarr. Brit. B. 2 edit. iii. p. 583, fig. Gould, B. of Eur. pl. 431.

- -? Male. From Col. Montagu's collection.
- b. ? Young female. Presented by Joseph Sabine, Esq.

c. Scilly Islands. Presented by D. W. Mitchell, Esq.

d. Hills of Hoy, Orkney. Adult. From Mr. J. Baker's collection. e-q. Hills of Hoy, Orkney. Very young. From Mr. J. Baker's collection.

# 5. LARUS ARGENTATUS. The Herring Gull.

Larus argentatus, Brünn. Orn. Bor. p. 44; Gmel. S. N. i. p. 600; Temm. Man. d'Orn. (1820) p. 764; Boie, Isis (1822), p. 562; Steph. Gen. Zool. xiii. p. 191; Flem. Brit. An. p. 140; Jenuns.

Man. B. Vert. An. p. 276; Eyton, Cat. Brit. B. p. 52; Naum. Vög. Deuts. (1840) x. p. 379, t. 266; Keys. & Bl. Wirbelth. Eur. p. 96; Schleg. Rev. Crit. des Ois. dEur p. 124; Macgill. Man. N. H. Ornith. ii. p. 246; G. R. Gray, Gen. of B. iii. p. 654.

Larus glaucus, Retz. Faun. Suec. p. 156.
Larus glaucus, pt., Temm. Man. d'Orn. 1815, p. 493.
Laroides major, Brehm, Vög. Deuts. p. 738.
Laroides argentatus, Brehm, Vög. Deuts. p. 740.
Laroides argentacus, Brehm, Vög. Deuts. p. 742.
Laroides argentaceus, Brehm, Vög. Deuts. p. 742.
Laroides argentaceus, Brehm, Vög. Deuts. p. 742.
Laroides americanus, Brehm, Vög. Deuts. p. 743.

Herring Gull, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 214; Penn. Brit. Zool. (1812) ii. p. 181; Selby, Brit. Orn. ii. p. 504; Yarr. Brit. B. 2 edit. iii. p. 588,

Silvery Gull, Penn. Arct. Zool. ii. p. 533.

Gould, B. of Eur. pl. 434.

a. Great Britain. From Col. Montagu's collection.
b, c. Great Britain. Presented by Joseph Sabine, Esq.
d, e. Great Britain. From Col. Montagu's collection.

f. Great Britain.

Shetland Islands. Very young. From Mr. Bullock's collection.
 h-j. Hills of Hoy, Orkney. Very young. From Mr. J. Baker's collection.

k. Hills of Hoy, Orkney. Adult. From Mr. J. Baker's collection.
 l. Hills of Hoy, Orkney. Young. From Mr. J. Baker's collection.
 m. Hills of Hoy, Orkney. Female. From Mr. J. Baker's collection.

n. Sternum. England. Presented by John Ray, Esq.

# 6. LARUS CANUS. The Common Gull.

Larus canus, Linn. S. N. i. p. 224; Temm. Man. d'Orn. 1815, p. 499; Leach, Syst. Cat. Mam. & B. B. M. p. 40; Boie, Isis (1822), p. 563; Steph. Gen. Zool. xiii. p. 198; Flem. Brit. An. p. 140; Jenyns, Man. B. Vert. An. p. 275; Eytom, Cat. Brit. B. p. 52; Keys. & Bl. Wirbelth. Eur. p. 96; Naum. Vög. Deuts. (1840) x. p. 301, t. 261; Schleg. Rov. Crit. des Ois. d'Eur. p. 125; Macgill. Man. N. H. Ornith. ii. p. 248.

Larus hybernus, Gmel. S. N. i. p. 596; G. R. Gray, Gen. of B. iii.

Larus cyanorhynchus, Meyer, Taschenb. p. 480.

Larus procellosus, pt., Bechst. Naturg. Deuts. iv. p. 647. Laroides procellosus, Brehm, Vog. Deuts. p. 750.

Laroides canus, Brehm, Vog. Deuts. p. 751.

Laroides canescens, Brehm, Vog. Deuts. p. 753.

Common Gull, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 218, fig.; Penn. Brit. Zool. (1812) ii. p. 184, pl. 34, low. fig.; Selby, Brit. Orn. ii. p. 490; Yarr. Brit. B. 2 edit. iii. p. 570, fig.

Winter Gull, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 221; Penn. Brit. Zool. (1812) ii. p. 185.

Gould, B. of Eur. pl. 437.

a. Devonshire. From Col. Montagu's collection.

b. Thames. Presented by A. Cooper, Esq., R.A.

- c. Hayling's Island. Presented by J. B. Tyndale, Esq. d. Hills of Hoy, Orkney. Male. From Mr. J. Baker's collection.
- e. Hills of Hoy, Orkney. Female. From Mr. J. Baker's collection.
- f-h. Hills of Hoy, Orkney. Very young. From Mr. J. Baker's collection.
- i. Sternum. England. Presented by John Ray, Esq.

### b. Chroicocephalus.

# 7. LARUS ATRICILLA. The Laughing Gull.

Larus atricilla, Linn. S. N. i. p. 225; Temm. Man. d'Orn. (1820) ii. p. 779; Steph. Gen. Zool. xiii. p. 205; Flem. Brit. An. p. 142; Jenyus, Man. B. Vert. An. p. 273; Keys. & Bl. Wirbelth. Eur. p. 96; Schleg. Rev. Crit. des Ois. d'Eur. p. 127; G. R. Gray, Gen. of B. iii. p. 654.

Larus ridibundus, Wils. Amer. Orn. pl. 74, f. 4.

Xema atricilla, Boie, Isis (1822), p. 563.

Larus plumbiceps, Brehm, Lehrb. p. 722. Gavia atricilla, Macgill. Man. N. H. Ornith. ii. p. 240.

Laughing Gull, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii. p. 193; Yarr. Brit. B. 2 edit. iii. p. 557, fig.

Gould, B. of Eur. pl. 426.

a. Winchelsea.

# 8. LARUS BIDIBUNDUS. The Black-headed Gull.

Larus ridibundus, Linn. S. N. i. p. 225; Temm. Man. d'Orn. 1815, p. 504; Leach, Syst. Cat. Mam. & B. B. M. p. 40; Steph. Gen. Zool. xiii. p. 201, pl. 22; Flem. Brit. An. p. 141; Jenyns, Man. B. Vert. An. p. 272; Keys. & Bl. Wirbelth. Eur. p. 95; Naum. Vög. Deuts. (1840) x. p. 264, t. 260; Schleg. Rev. Crit. des Ois. d'Eur. p. 126; G. R. Gray, Gen. of B. iii. p. 654.

Larus cinerarius, Linn. S. N. i. p. 224.

Larus canescens, Bechst. Naturg. Deuts. iv. p. 649.

Larus erythropus, Gmel. S. N. i. p. 597.

Larus procellosus, pt., Bechst. Naturg. Deuts. iv. p. 647.

Xema ridibundus, Boie, Isis (1822), p. 563; Brehm, Vög. Deuts. p. 760.

Xema pileatum, Brehm, Vög. Deuts. p. 761, t. 37, f. 4.

Chroicocephalus ridibundus, Eyton, Cat. Brit. B. p. 53.
Gavia ridibunda, Kaup, Naturl. Syst. p. 99; Macgill. Man. N. H.
Ornith. ii. p. 240.

Larus atricilla, Pall. Zoogr. ii. p. 324. Larus nævius, Pall. Zoogr. ii. p. 327.

Black-headed Gull, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 222, fig.; Penn. Brit. Zool. (1812) ii. p. 189; Selby, Brit. Orn. ii. p. 487; Yarr. Brit. B. 2 edit. iii. p. 550, fig.

Brown-headed Gull, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii.

p. 226.
Red-legged Gull, Mont. Orn. Dict.; Penn. Brit. Zool. (1812) ii.
p. 192.

Black-headed Gull, variety, Penn. Brit. Zool. (1812) ii. p. 191.

Pl. enl. 969, 970; Gould, B. of Eur. pl. 425:

a. Devonshire. From Col. Montagu's collection.

b, c. Carmarthenshire. From Col. Montagu's collection.

d. Orkney Islands. From Mr. Bullock's collection.

e, f. Hills of Hoy, Orkney. From Mr. J. Baker's collection.
g. Hills of Hoy, Orkney. From Mr. J. Baker's collection.

g. Sternum. England. Presented by T. Ingall, Esq.

# 9. LARUS CAPISTRATUS. The Masked Gall.

Larus capistratus, Temm. Man. d'Orn. (1820) ii. p. 785; Steph. Gen. Zool. xiii. p. 204; Flem. Brit. An. p. 143; Jenyns, Man. B. Vert. An. p. 272.

Larus ridibundus, pt., Keys. § Bl. Wirbelth. Eur. p. 95; Naum. Vög. Deuts. (1840) x. p. 264; G. R. Gray, Gen. of B. iii. p. 654.
Larus ridibundus minor, Schleg. Rev. Crit. des Ois. d'Eur. p. 127.
Xema capistrata, Boie, Isis (1822) p. 563; Brehm, Vög. Deuts. p. 762.

Chroicocephalus capistratus, Eyton, Cat. Brit. B. p. 53. Gavia capistrata, Kaup, Naturl. Syst. p. 99.

Masked Gull, Lath. Hist. of B. x. p. 139; Yarr. Brit. B. 2 edit. iii. p. 547, fig.

Brown-headed Gull, Eyton, Hist. R. Brit. B. p. 63.

a. Scotland. From Mr. Bullock's collection.

### 10. LARUS BONAPARTII. Bonaparte's Gull.

Laras Bonapartii, Richards. & Swains. Faun. Bor. Amer. ii. p. 425, pl. 72; Thompson, Ann. & Mag. Nat. Hist. (1848) p. 192; Newm. Zoologist (1848) p. 2069.

Xema Bonapartii, Pr. Bonap. Geogr. Comp. List of B. p. 62.

Larus capistratus, Pr. Bonap.

Audub. B. of Amer. pl. 324. (Ireland).

# c. Hydrocolæus.

### 11. LARUS MINUTUS. The Little Gull.

Larus minutus, Pall. Reis. iii. p. 702; Temm. Man. d'Orn. 1815, p. 508; Leach, Syst. Cat. Mam. & B. B. M. p. 41; Steph. Gen. Zool. xiii. p. 206; Flem. Brit. An. p. 142; Jenyns, Man. B. Vert. An. p. 271; Keys. & Bl. Wirbelth. Eur. p. 95; Naum. Vög. Deuts. (1840) x. p. 242, t. 258; Schleg. Rev. Crit. des Ois. d'Eur. p. 127; G. R. Gray, Gen. of B. iii. p. 654.

Larus atricilloïdes, Falk. Reis. iii. p. 355, t. 24.

Xema minutum, Boie, Isis (1822), p. 365; Brehm, Vog. Deuts. p. 763.

Hydrocolœus minutus, Kaup, Naturl. Syst. p. 113. Chroicocephalus minutus, Eyton, Cat. Brit. B. p. 54. Gavia minuta, Macgill. Man. N. H. Ornith. ii. p. 242.

Little Gull, Mont. Orn. Dict. App. to Suppl. with pl.; Selby, Brit. Orn. ii. p. 484; Eyton, Hist. R. Brit. B. p. 61, fig.; Yarr. Brit. B. 2 edit. iii. p. 543, fig.

Gould, B. of Eur. pl. 428.

a. Devonshire. From Col. Montagu's collection.

### 4. XEMA.

Xema, Leach, Ross's Voy. App. (1825).

# 1. XEMA SABINI. Sabine's Gull.

Xema Sabini, Leach, Ross's Voy. App. p. lvii, with fig.; Steph. Gen. Zool. xiii. p. 177, pl. 20; Eyton, Cat. Brit. B. p. 54; G. R. Gray, Gen. of B. iii. p. 655.

Larus Sabini, Sabine, Linn. Trans. xii. p. 520, pl. 29; Jenyns, Man. B. Vert. An. p. 270; Keys. & Bl. Wirbelth. Eur. p. 95; Schleg. Rev. Crit. des Ois. d'Eur. p. 128; Temm. Man. d'Orn. (1840) iv. p. 488.

Gavia Sabini, Macgill. Man. N. H. Ornith. ii. p. 241.

Xema collaris, Leach.

Sabine's Xeme, Eyton, Hist. R. Brit. B. p. 64, fig. Sabine's Gull, Yarr. Brit. B. 2 edit. iii. p. 537, fig.

Gould, B. of Eur. pl. 429.

(Ireland).

### 5. RISSA.

Rissa, Leach, Steph. Gen. Zool. xiii, p. 180 (1825). Cheimonea, Kaup, Naturl. Syst. der Eur. Thier. p. 84 (1829).

# 1. RISBA TRIDACTYLA. The Kittiwake Gull.

Larus Rissia, Linn. S. N. i. p. 224; Leach, Syst. Cat. Mam. & B.

B. M. p. 40; Flem. Brit. An. p. 141.

Larus tridactylus, Linn. S. N. i. p. 224; Temm. Man. d'Orn, 1815, p. 502; Jenyns, Man. B. Vert. An. p. 274; Keys. & Bl. Wirbelth. Eur. p. 95; Naum. Vog. Deuts. (1840) x. p. 322, t. 262; Schleg. Rev. Crit. des Ois. d'Eur. p. 126.

Larus gavia, Pall. Zoogr. ii. p. 329. Larus canus, Pall. Zoogr. ii. p. 330. Larus torquatus, Pall. Zoogr. ii. p. 328. Gavia tridactyla, Boie, Isis (1822), p. 563.

Rissa Brunnichii, Leach, Steph. Gen. Zool. xiii. p. 181, pl. 21.

Cheimonea tridactyla, Kaup, Naturl. Syst. p. 84.

Rissa cinerea, Eyton, Cat. Brit. B. p. 52.

Rissa tridactyla, Macgill. Man. N. H. Ornith. ii. p. 250; G R. Gray, Gen. of B. iii. p. 655.

Laroides tridactylus, Brehm, Vög. Deuts. p. 754.

Laroides rissa, Brehm, Vög. Deuts. p. 755, t. 37, f. 3.

Laroides minor, Brehm, Vog. Deuts. p. 756.

Kittiwake, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 229, fig.; Selbu, Brit. Orn. ii. p. 493.

Kittiwake Gull, Penn. Brit. Zool. (1812) ii. p. 186; Yarr. Brit. B. 2 edit. iii. p. 562, fig.

Tarrock Gull, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 231; Penn. Brit. Zool. (1812) ii. p. 187.

Pl. enl. 253, 387; Gould, B. of Eur. pl. 435.

a. Great Britain. Presented by A. Cooper, Esq., R.A.

b. Scotland. From Col. Montagu's collection.

c. Yarmouth. Young.

d. Hills of Hoy, Orkney. Adult. From Mr. J. Baker's collection. e. Sternum. England. Presented by John Ray, Esq.

#### 6. PAGOPHILA.

Pagophila, Kaup, Naturl. Syst. der Eur. Thier. p. 69 (1829). Gavia, Boie, Isis (1822), p. 563. Cetosparactes, Macgill. Man. N. H. Ornith. ii. p. 251 (1842).

# 1. PAGOPHILA EBURNEA. The Ivory Gull.

Larus eburneus, Gmel. S. N. i. p. 596; Temm. Man. d'Orn. 1815. p. 498; Steph. Gen. Zool. xiii. p. 195; Jenyns, Man. B. Vert. An. p. 276; Eyton, Cat. Brit. B. p. 53; Keys. & Bl. Wirbelth. Eur. p. 96; Naum. Vog. Deuts. (1840) x. p. 341, t. 263; Schleg. Rev. Crit. des Ois. d'Eur. p. 126.

Larus niveus, Mart. Hist. de Spitzb. t. 4, f. A.

Larus candidus, Fabr. Faun. Græn. p. 67; Flem. Brit. An. p. 142. Cetosparactes eburneus, Macgill. Man. N. H. Ornith. ii. p. 252. Pagophila eburnea, Kaup, Naturl. Syst. p. 69; G. R. Gray, Gen. of B. iii. p. 655.

Gavia eburnea, Boie, Isis (1822), p. 563; Brehm, Vog. Deuts. p.

Gavia nivea, Brehm, Vog. Deuts. p. 766, t. 38, f. 1.

Ivory Gull, Selby, Brit. Orn. ii. p. 497; Yarr. Brit. B. 2 edit. iii. p. 567, fig.

Pl. enl. 994; Gould, B. of Eur. pl. 436.

(Shetland, Frith of Clyde, and West Coast of Ireland).

# ii. STERNINÆ.

### 1. STERNA.

Sterna, Linn. S. N. (1748).
Gelochelidon, Brehm, Vög. Deuts. (1830).
Laropis, Wayl. Isis (1832), p. 1225.
Thalasseus, Boie, Isis (1822), p. 563.
Actochelidon, Kaup, Naturl. Syst. der Eur. Thier. p. 31 (1829).
Hydroprogne, Kaup, Naturl. Syst. der Eur. Thier. p. 91 (1829).
Sylochelidon, Brehm, Vög. Deuts. (1830).
Helopus, Wayl. Isis (1832), p. 1224.
Planetis, Wayl. Isis (1832), p. 1222.
Thalassea, Kaup, Naturl. Syst. der Eur. Thier. p. 97 (1829).
Sternula, Boie, Isis (1822), p. 563.
Haliphana, Wayl. Isis (1832), p. 1224.
Onychoprion, Wayl. Isis (1832), p. 277.
Pelecanopus, Wayl. Isis (1832), p. 277.
Hydrocecropis, Boie, Isis (1834), p. 178.

### a. THALASSEUS.

# 1. STERNA CASPIA. The Caspian Tern.

Sterna caspia, Pall. Nov. Comm. Petrop. xiv. p. 582; Temm. Man. d'Orn. 1815, p. 476; Steph. Gen. Zool. xiii. p. 145; Jenyns, Man. B. Vert. An. p. 264; Keys & Bl. Wirbelth. Eur. p. 97; Naum. Vög. Deuts. (1840) x. p. 18, 1. 248; Schleg. Rev. Crit. des Ois. d'Eur. p. 128; Maegill. Man. N. H. Ornith. ii. p. 230; G. R. Gray, Gen. of B. iii. p. 658.
Sterna Tschegrava, Lepechin, Nov. Comm. Petrop. xiv. p. 500,

t. 132. Sterna megarhynchos, Meyer, Taschenb. Deuts. ii. p. 457.

Thalasseus caspius, Boie, Isis (1822), p. 563. Hydroprogne caspia, Kaup, Naturl. Syst. p. 91. Sylochelidon caspia, Brehm, Vög. Deuts. p. 770. Sylochelidon balthica, Brehm, Vög. Deuts. p. 769.

Sylochelidon Schillingii, Brehm, Vöy. Deuts. p. 770. Caspian Tero, Selby, Brit. Orn. ii. p. 463; Eyton, Hist. R. Brit. B. p. 66, fig.; Yarr. Brit. B. 2 edit. iii. p. 493, fig.

Sparrm. Mus. Carls. t. 62; Gould, B. of Eur. pl. 414.

a. British Channel.

#### 2. STERNA VELOX. The Swift Tern.

Sterna velox, Rupp. Zool. Atlas, t. 13; Thompson, Ann. & Mag. Nat. Hist. 1847, p. 170.
(Sutton, near Dublin).

## b. ACTOCHELIDON.

# 3. STERNA CANTIACA. The Sandwich Tern. Sterna cantiaca, Gmel. S. N. i. p. 606; Temm. Man. d'Orn. 1815,

p. 479; Steph. Gen. Zool. xiii. p. 147; Jenyns, Man. B. Vert. An. p. 265; Eyton, Cat. Brit. B. p. 54; Keys. & Bl. Wirbelth. Eur. p. 97; Naum. Vog. Deuts. (1840) x. p. 51, t. 250; Schleg. Rev. Crit. des Ois. d'Eur. p. 129; G. R. Gray, Gen. of B. iii. p. 658. Sterna Boysii, Lath. Ind. Orn. ii. p. 806; Leach, Syst. Cat. Mam. & B. B. M. p. 41; Flem. Brit. An. p. 142; Macgill. Man. N. H. Ornith. ii. p. 230. Sterna nævia, Bew. Brit. B. (1804) ii. p. 207. Sterna stuberica, Bechst. Naturg. Deuts. iv. p. 679. Sterna canescens, Meyer, Taschenb. Deuts. ii. p. 458. Sterna africana, Gmel. S. N. i. p. 605. Sterna nebulosa, Sparrm. Mus. Carls. t. 63. Sterna striata, Gmel. S. N. i. p. 609. Thalasseus cantiacus, Boie, Isis (1822), p. 563. Columba columbina, Schrank, Fauna Boica, p. 252. Actochelidon cantiacus, Kaup, Naturl. Syst. p. 31. Thalasseus canescens, Brehm, Vog. Deuts. p. 776. Thalasseus candicans, Brehm, Vog. Deuts. p. 777, t. 38, f. 4. Sandwich Tern, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 204, fig.; Penn. Brit. Zool. (1812) ii. p. 200; Selby, Brit. Orn. ii. p. 464; Yarr. Brit. B. 2 edit. iii. p. 497, fig. Gould, B. of Eur. pl. 415.

- a. Great Britain. Adult. Presented by J. G. Children, Esq.
- b. Kent. From Col. Montagu's collection.
- c. Scilly Islands. Adult. Presented by D. W. Mitchell, Esq.
- d. Sternum. England. Presented by T. Ingall, Esq.
- e. Sternum. England. Presented by John Ray, Esq.

#### C. STERNA.

## 4. STERNA PARADISEA. The Roseate Tern.

Sterna paradisea, Briinn. Orn. Bor. p. 46; Keys. & Bl. Wirbelth. Eur. p. 97; Schleg. Rev. Crit. des Ois. d'Eur. p. 130; G. R.

Gray, Gen. of B. iii. p. 659.

Sterna Dougallii, Mont. Orn. Dict. Suppl. p. ; Leach, Syst. Cat. Mam. & B. B. M. p. 41; Temm. Man. d'Orn. (1820) ii. p. 738; Boie, Isis (1822) p. 363; Steph. Gen. Zool. xiii. p. 153; Flem. Brit. An. p. 143; Brehm, Vog. Deuts. p. 779; Jenyns, Man. B. Vert. An. p. 265; Eyton, Cat. Brit. B. p. 55; Naum. Vog. Deuts. (1840) x. p. 78, t. 251.

Thalassæa Dougalli, Kaup, Naturl. Syst. p. 97.

Sterna Macdongalli, Macgill. Man. N. H. Ornith. ii. p. 233.

Hydrocecropis Dougallii, Boie, Isis (1844) p. 179.

Roseate Tern, Mont. Orn. Dict. Suppl. p. , pl. ; Selby, Brit. Orn. ii. p. 470; Yarr. Brit. B. 2 edit. iii. p. 501, fig.

Gould, B. of Eur. pl. 418.

a. Frith of Clyde. From Col. Montagu's collection.

b. Frith of Clyde. Young. From Col. Montagu's collection.
c. Scilly Islands. Presented by James Griffin, Esq.

d, e. Scilly Islands. Presented by D. W. Mitchell, Esq.

## 5. STERNA HIRUNDO. The Common Tern.

Sterna hirundo, Linn. S. N. i. p. 227; Temm. Man. d'Orn. 1815, p. 481; Leach, Syst. Cat. Mam. & B. B. M. p. 41; Boie, Isis (1822) p. 563; Steph. Gen. Zool. xii. p. 150, pl. 18; Flem. Brit. An. p. 143; Kaup, Naturl. Syst. p. 26; Brehm. Vög. Deuts. p. 781; Jenyns, Man. B. Vert. An. p. 266; Keys. & Bl. Wirbelth. Eur. p. 97; Naum. Vög. Deuts. (1840) x. p. 89, t. 252; Macgill. Man. N. H. Ornith. ii. p. 231; Schleg. Rev. Crit. des Ois. d' Eur. p. 129; G. R. Gray, Gen. of B. iii. p. 659.

Sterna fluviatilis, Naum. Isis (1820) p. ; Brehm, Vog. Deuts. p.

779.

Sterna pomarina, Brehm, Vog. Deuts. p. 781. Sterna marina, Eyton, Cat. Brit, B. p. 55. Hydrocecropis hirundo, Boie, Isis (1844) p. 179. Common Tern, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 199, fig.; Penn. Brit. Zool. (1813) ii. p. 196; Selby, Brit. Orn. ii. p. 468; Yarr. Brit. B. 2 edit. iii. p. 504, fig.

Brown Tern, Mont. Orn. Dict.?

Brown Gull, Penn. Brit. Zool. (1812) ii. p. 193?

Pl. enl. 987; Gould, B. of Eur. pl. 417.

a. Great Britain. Adult. Presented by W. Yarrell, Esq.

b. Sussex. From Col. Montagu's collection.

- c. Sussex. Adult. Presented by W. Yarrell, Esq.
- d. Scilly Islands. Adult. Presented by D. W. Mitchell, Esq.

e. Great Britain. Young.

f. Sussex. Young.

g, h. Two sterna. England. Presented by T. Ingall, Esq. i, j. Two sterna. England. Presented by John Ray, Esq.

#### 6. STERNA MACROURA. The Arctic Tern.

Sterna macroura, Naum. Isis (1819), p. 1847; Brehm, Vög. Deuts. p. 784; Keys. & Bl. Wirbelth. Eur. p. 97; Naum. Vog. Deuts. (1840) x. p. 114, t. 253; G. R. Gray, Gen. of B. iii. p. 659.

Sterna hirundo, Faber.

Sterna arctica, Temm. Man. d'Orn. (1820) ii. p. 742; Boie, Isis (1822), p. 563; Steph. Gen. Zool. xiii. p. 152; Flem. Brit. An. p. 144; Kaup, Naturl. Syst. p. 26; Brehm, Vög. Deuts. p. 785; Jenyns, Man. B. Vert. An. p. 267; Eyton, Cat. Brit. B. p. 54; Macgill. Man. N. H. Ornith. ii. p. 232; Schleg. Rev. Crit. des Ois. d'Eur. p. 129.

Sterna argentata, Brehm, Beitr. iii. p. 692, et Vog. Deuts. p. 782, t. 38, f. 5.

Sterna argentacea, Brehm, Vög. Deuts. p. 783.

Sterna Nitzschii, Kaup, Isis (1824), p. 153; Brehm, Vög. Deuts. p. **786**.

Sterna brachytarsa, Graba.?

Arctic Tern, Selby, Zool. Journ. ii. p. 461; Selby, Brit. Orn. ii. p. 473; Eyton, Hist. R. Brit. B. p. 68, fig.; Yarr. Brit. B. 2 edit. iii. p. 507, fig.

Gould, B. of Eur. pl. 419.

a. Yarmouth.

b. Scilly Islands. Presented by D. W. Mitchell, Esq.

c. Sternum. England. Presented by John Ray, Esq.

## d. GELOCHELIDON.

#### 7. STERNA ANGLICA. The Gull-billed Tern.

Sterna auglica, Mont. Orn. Dict. Suppl. p.; Leach, Syst. Cat. Mam. & B. B. M. p. 41; Temm. Man. d'Orn. (1820) ii. p. 745; Flem. Brit. An. p. 143; Jenyns, Man. B. Vert. An. p. 269; Eyton, Cat. Brit. B. p. 54; Keys. & Bl. Wirbelth. Eur. p. 98; G. R. Gray, Gen. of B. iii. p. 659.

Sterna stubberica, Otto, Deuts. Ubers. von Buff. Naturg.

Thalasseus anglicus, Boie, Isis (1822), p. 563.

Viralva? anglica, Steph. Gen. Zool. xiii. p. 174.

Gelochelidon balthica, Brehm, Vog. Deuts. p. 772, t. 38, f. 3.

Gelochelidon agraria, Brehm, Vog. Deuts. p. 773.

Gelochelidon meridionalis, Brehm, Vög. Deuts. p. 774.

Laropis anglica, Wagl. Isis (1832), p. 1225.

Gelochelidon palustris, Macgill. Man. N. H. Ornith, ii, p. 237. Gelochelidon anglica, Pr. Bonap. Geogr. Comp. List of B. p. 61; Boie, Isis (1844) p. 187.

Sterna risoria, Brehm, Beitr. iii. p. 650.

Gull-billed Tern, Mont. Orn. Dict. Suppl. p. pl. ; Selby, Brit. Orn. ii. p. 480; Eyton, Hist. R. Brit. B. p. 97; Yarr. Brit. B. 2 edit. iii. p. 515, fig.

Gould, B. of Eur. pl. 416.

u. Great Britain. From Mr. Bullock's collection.

b. Kent. From Col. Montagu's collection.

## e. STERNULA.

## 8. STERNA MINUTA. The Lesser Tern.

Sterna minuta, Linn. S. N. i. p. 228; Temm. Man, d'Orn. 1815, p. 487; Leach, Syst. Cat. Mam. & B. B. M. p. 41; Steph. Gen. Zool. xiii. p. 163; Flem. Brit. An. p. 144; Jenyns, Man. B. Vert. An. p. 267; Eyton, Cat. Brit. B. p. 55; Keys. & Bl. Wirbelth. Eur. p. 97; Naum. Vög. Deuts. (1840) x. p. 145, t. 254; Macgill. Man. N. H. Ornith. ii. p. 234; Schleg. Rev. Crit. des Ois. d'Eur. p. 130; G. R. Gray, Gen. of B. iii. p. 659.

Sterna metopoleucos, S. G. Gmel. Nov. Comm, Petrop. xv. p. 475,

1. 22.

Sternula minuta, Boie, Isis (1822) p. 563; Kaup, Naturl. Syst. p. 95.

Sternula fissipes, Brehm, Vög. Deuts. p. 790. Sternula pomarina, Brehm, Vög. Deuts. p. 791.

Sternula danica, Brehm, Vog. Deuts. p. 791.

Lesser Tern, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 201, fig.; Penn. Brit. Zool. (1812) ii. p. 198, pl. 35, upp. fig.; Selby, Brit. Orn. ii. p. 475; Yarr. Brit. B. 2 edit. iii. p. 519, fig.

Pl. enl. 995; Gould, B. of Eur. pl. 420.

- a. Sussex. From Col. Montagu's collection.
   b. Weymouth. Young. From Col. Montagu's collection.
- c. Great Britain.
- d. Sternum. England. Presented by John Ray, Esq.

#### 2. HYDROCHELIDON.

Hydrochelidon, Boie, Isis (1822), p. 563. Viralva, Leach, Steph. Gen. Zool. xiii. p. 166 (1826). Pelodes, Kaup, Naturl. Syst. der Eur. Thier. p. 107 (1829).

#### 1. HYDROCHELIDON HYBRIDA. The Whiskered Tern.

Sterna hybrida, Pall. Zoogr. ii. p. 338; Keys. & Bl. Wirbelth. Eur.

Sterna leucopareia, Natt., Temm. Man. d'Orn. (1820) ii. p. 746;
Boie, Isis (1822), p. 563; Naum. Vög. Deuts. (1840) x. p. 168,
t. 255.

Sterna Delamotta, Vieill. Encyc. Meth. p. 350.

Viralva leucopareia, Steph. Gen. Zool. xiii. p. 171.

Pelodes leucopareia, Kaup, Naturl. Syst. p. 107.

Hydrochelidon leucopareia, Boie; Brehm, Vog. Deuts. p. 797, t. 39,

Hydrochelidon hybrida, G. R. Gray, Gen. of B. iii. p. 660.

Whiskered Tern, Yarr. Brit. B. 2 edit. iii. p. 512, fig.

Gould, B. of Eur. pl. 424.

(Dorsetshire).

#### 2. Hydrochelidon fissipes. The Black Tern.

Sterna fissipes, Linn. S. N. i. p. 228.

Sterna nigra, Briss. Ornith. vi. p. 211; Temm. Man. d'Orn. 1815,
p. 484; Leach, Syst. Cat. Mam. & B. B. M. p. 41; Flem. Brit.
An. p. 144; Jenyns, Man. B. Vert. An. p. 268; Eyton, Cat.
Brit. B. p. 55; Keys. & Bl. Wirbelth. Eur. p. 98; Naum. Vög.
Deuts. (1840) x. p. 189, t. 256; Macgill. Man. N. H. Ornith. ii.
p. 233; Schleg. Rev. Crit. des Ois. d'Eur. p. 130.

Hydrochelidon nigra, Boie, Isis (1822) p. 563; Kaup, Naturl. Syst.

p. 109; Brehm, Vog. Deuts. p. 793.

Hydrochelidon fissipes, G. R. Gray, Gen. of B. iii. p. 660,

Viralva nigra, Steph. Gen. Zool. xiii. p. 167.

Sterna nævia, Linn. S. N. i. p. 228.

Hydrochelidon nigricans, Brehm, Vög. Deuts. p. 794. Hydrochelidon obscura, Brehm, Vög. Deuts. p. 795.

Black Tern, Mont. Orn. Dici.; Bew. Brit. B. (1804) ii. p. 203; Penn. Brit. Zool. (1812) ii. p. 199; Selby, Brit. Orn. ii. p. 477; Yarr. Brit. B. 2 edit. iii. p. 523, fig.

Pl. enl. 333, 924; Gould, B. of Eur. pl. 422.

a. Kent.

b. Sussex. From Col. Montagn's collection.

## 3. Hydrochelidon Nigra. The White-winged Black Tern.

Sterna nigra, Linn. S. N. i. p. 227.

Sterna leucoptera, Meisner, u. Schinz. Vog. d. Schweig. p. 264; Temm. Man. d'Orn. (1820) ii. p. 747; Naum. Vög. Deuts. (1840) x. p. 215, t. 257; Keys. & Bl. Wirbelth. Eur. p. 98; Schleg. Rev. Crit. des Ois. d'Eur. p. 131; McCoy, Ann. & Mag. Nat. Hist. 1845, p. 271, fig.

Sterna fissipes, Pall. Zoogr. ii. p. 398.

Hydrochelidon leucoptera, Boie, Isis (1822) p. 563; Kaup, Naturl. Syst. p. 109; Brehm, Vög. Deuts. p. 796.

Viralva leucoptera, Steph. Gen. Zool. xiii. p. 170.

Hydrochelidon nigra, G. R. Gray, Gen. of B. iii, p. 660. White-winged Black Tern, Yarr. Brit. B. 2 edit. iii, p. 527, fig.

Gould, B. of Eur. pl. 423.

(Found in most parts of England).

#### 3. ANOÜS.

Anoüs, Leach, Steph. Gen. Zool. xiii. p. 139 (1825). Noddi, Cuv. Règ. An. (1817) i. p. 521.

Meglalopterus, Boie, Isis (1826) p. 980.

Stolida, Less. Tr. d'Orn. p. 62 (1831).

Gavia, Swains. Classif. of B. ii. p. 373 (1837).

Procelsterna, Lafr. Rev. Zool. (1841) p. 242.

Nænia, Boie, Isis (1844) p.

## a. Anous.

## 1. Anous stolidus. The Black Noddy.

Sterna stolida, Linn. S. N. i. p. 227; Jenyns, Man. B. Vert. An. p. 270; Schleg. Rev. Crit. des. Ois. d'Eur. p. 131.
Anoüs niger, Steph. Gen. Zool. xiii. p. 140; Eyton, Cat. Brit. B. p. 55.
Megalopterus stolidus, Keys. & Bl. Wirbelth. Eur. p. 98; Macgill. Man. N. H. Ornith. ii. p. 236.
Anoüs stolidus, G. R. Gray, List of Gen. of B. (1841), p. 100; Gen. of B. iii. p. 661.
Black Noddy, Eyton, Hist. R. Brit. B. p. 70, fig.; Yarr. Brit. B. 2 edit. iii. p. 531, fig.
Gould, B. of Eur. pl. 421.
(Ireland).

## FAM. VI. PELECANIDÆ.

## i. PELECANINÆ.

#### 1. SULA.

Suls, Briss. Ornith. vi. p. 494 (1760).

Dysporus, Ill. Prodr. p. 279 (1811).

Moris, Leach, Syst. Cat. Mam. & B. B. M. (1816).

Morus, Vieill. Analyse, &c., p. 63 (1816).

#### 1. SULA BASSANA. The Gannet.

Pelecanus bassanus, Linn. S. N. i. p. 217. Pelecanus maculatus, Gmel. S. N. i. p. 579.

Sula bassana, Briss., Boie, Isis (1822) p. 563; Steph. Gen. Zool. xiii. p. 100, pl. 11; Flem. Brit. An. p. 118; Brehm, Vög. Deuts. p. 813; Jenyns, Man. B. Vert. An. p. 263; Eyton, Cat. Brit. B. p. 56; Keys. & Bl. Wirbelth. Eur. p. 89; Macgill. Man. N. H. Ornith. ii. p. 225; Schleg. Rev. Crit. des. Ois. d'Eur. p. 123;

G. R. Gray, Gen. of B. iii. p. 666.

Moris bassana, Leach, Syst. Cat. Mam. & B. B. M. p. 35. Sula alba, Moyer, Taschenb. Deuts. ii. p. 582; Temm. Man. d'Orn. 1815, p. 593; Kaup, Naturl. Syst. p. 68.

Morus bassanus, Vicill.

Dysporus bassanus, Illig. Prodr. p. 279; Naum. Vög. Deuts. (1842) xi. p. 14, t. 278.

Sula major, Brehm, Vog. Deuts. p. 812.

Gannet, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 393, fig.; Penn. Brit. Zool. (1812) ii. p. 286, pl. 48; Yarr. Brit. B. 2 edit. iii. p. 489, fig.

Solan Gannet, Selby, Brit. Om. ii. p. 455.

Pl. enl. 278, 986; Gould, B. of Eur. pl. 412.

a. Devonshire. Adult. From Col. Montagu's collection.

b. - ? Adult.

c. ——? In change. From Mr. Bullock's collection.
d. Devonshire. Young. From Col. Montagu's collection.

e. Shetland Islands.? Adult. From Mr. J. Baker's collection.

f, g. Two tracheæ. England.

h. Sternum. England. Presented by John Ray, Esq.

## 2. GRACULUS.

Graculus, Linn. S. N. (1735).
Phalacrocorax, Briss. Ornith. vi. p. 511 (1760).
Carbo, Lacep. Mem. de l'Inst. (1800—1801).
Halieus, Ill. Prodr. p. 279 (1811).
Hydrocorax, Vieill. Analyse, 3°c., p. 63 (1816).
Gulosus, Mont. Orn. Dict. App. (1813).

#### 1. Graculus carbo. The Common Corvorant.

Pelecanus carbo, Linn. S. N. i. p. 216.

Pelecanus phalacrocorax, Brünn. Orn. Bor. p. 31.

Carbo cormoranus, Meyer, Taschenb. Deuts. ii. p. 576; Boie, Isis (1822), p. 563; Kaup, Naturl. Syst. p. 85; Brehm, Vog. Deuts. p. 816; Schleg. Rev. Crit. des Ois. d'Eur. p. 122.

Halieus carbo, Illig. Prodr. p. 279.

Phalacrocorax carbo, Leach, Syst. Cat. Mam. & B. B. M. p. 34; Cuv. Reg. An. (1817) p. 524; Steph. Gen. Zool. xiii. p. 76, pl. 10; Flem. Brit. An. p. 117; Jenyns, Man. B. Vert. An. p. 262; Eyton, Cat. Brit. B. p. 55; Keys. & Bl. Wirbelth. Eur. p. 88; Macgill. Man. N. H. Ornith. ii. p. 222.

Hydrocorax carbo, Vieill. N. Dict. d'Hist. Nat. viii. p. 83.

Graculus carbo, G. R. Gray, Gen. of B. iii. p. 667. Halieus cormoranus, Naum. Vög. Deuts. (1842) xi. p. 52, t. 279.

Carbo glacialis, Brehm, Vög. Deuts. p. 817.

Carbo arboreus, Brehm, Vog. Deuts. p. 818.

Carbo subcormoranus, Brehm, Vog. Deuts. p. 819.

Corvorant, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 381, fig. Common Corvorant, Penn. Brit. Zool. (1812) ii. p. 281; Selby, Brit. Orn. ii. p. 446; Yarr. Brit. B. 2 edit. iii. p. 480, fig.

Crested Corvorant, Bew. Brit. B. (1804) ii. p. 388, fig.

Pl. enl, 927; Gould, B. of Eur. pl. 407.

a. Devonshire. From Col. Montagu's collection.

b. Pembrokeshire. From Col. Montagu's collection.

c. Great Britain.

d. Craigs of Hoy, Orkney. Very young. From Mr. J. Baker's collection.

e. Skull. England.

f, g. Two tracheæ. England.

h. Sternum. England. Presented by John Ray, Esq.

i. Skull. England. Presented by John Ray, Esq.

i. Skeleton. England.

## 2. Graculus Linnæii. The Shag.

Pelecanus graculus, Linn. S. N. i. p. 217. Pelecanus cristatus, Faber, Fauna Grænl. p. Carbo cristatus, Temm. Man. d'Orn. (1820) ii. p. 900; Boie, Isis (1822), p. 563.

Halieus graculus, Illig. Licht. Cat. Dupl. Berl. Mus. p. 86; Naum.

Vög. Deuts. (1842) xi. p. 88, t. 280.

Phalaerocorax graeulus, Leach, Syst. Cat. Man. & B. B. M. p. 34; Cuv. Règ. An. (1817) i. p. 525; Flem. Brit. An. p. 117; Eyton, Cat. Brit. B. p. 56; Keys. & Bl. Wirbelth. Eur. p. 88.

Hydrocorax graculus, Vieill. N. Dict. d'Hist. Nat. viii. p. 87.
Carbo graculus, Meyer, Taschenb. Deuts. ii. p. 578; Brehm. Vöy.
Deuts. p. 820, t. 40, f. 2; Schleg. Rev. Crit. des Ois. d'Eur.
p. 123.

Phalacrocorax cristatus, Steph. Gen. Zool. xiii. p. 83; Flem. Brit.

An. p. 118; Jenyns, Man. B. Vert. An. p. 262.

Pelecanus leucogaster, Vieill.

Carbo brachyuros, Brehm, Vog. Deuts. p. 822.

Graculus Linnæii, G. R. Gray, Gen. of B. iii. p. 667.

Shag, Mont. Orn. Dict.; Bew. Brit. B. (1804) ii. p. 390, fig.; Penn. Brit. Zool. (1812) ii. p. 285.

Crested Shag, Mont. Orn. Dict.

Crested Shag, Mont. Orn. Dict.
Crested Corvorant, Penn. Brit. Zool. (1812) ii. p. 284, pl. 47.
Crested Shag or Green Cormorant, Selby, Brit. Orn. ii. p. 450.
Shag or Green Cormorant, Yarr. Brit. B. 2 edit. iii. p. 486, fig.

Gould, B. of Eur. pl. 140.

a. Scotland.

b. Great Britain. Young. From Mr. Turner's collection.

c. Great Britain. Female.

d, e. Craigs of Hoy, Orkney. From Mr. J. Baker's collection. f, g. Two trachese. England.

## ? 3. PELECANUS.

Pelecanus, Linn. S. N. (1735). Onocrotalus, Mahr. Av. Gen. p. 63 (1752).

## ? I. Pelecanus onocrotalus. The White Pelican.

Pelecanus onocrotalus, Linn. S. N. i. p. 215; Temm. Man. d'Orn. 1815, p. 584; Boie, Isis (1822) p. 363; Steph. Gen. Zool. xiii. p. 109, pl. 12; Flem. Brit. An. p. 118; Kaup, Naturl. Syst. p. 79; Brehm, Vöy. Deuts. p. 824, t. 40, f. 1; Jenyns, Man. B. Vert. An. p. 264; Keys. & Bl. Wirbelth. Eur. p. 89; Naum. Vöy. Deuts. (1842) xi. p. 150, t. 282; Schleg. Rev. Crit. des Ois. d'Eur. p. 122; G. R. Gray, Gen. of B. iii. p. 668.

Pelecanus roseus, Eversm. Addend. ad Zoogr. Rosso. Asiat. p. 29. Onocrotalus Phænix, Less. Pelican, Mont. Orn. Dict. Suppl.

Pl. enl. 87; Gould. B. of Eur. pl. 405.

(Horsey Fen? escaped from the King's Mew? 1663).



# LIST

OF THE

# SPECIMENS

0 F

# BRITISH ANIMALS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

PART IV.—CRUSTACEA.

PRINTED BY ORDER OF THE TRUSTEES,
LONDON, 1850.

LONDON:

PRINTED BY EDWARD NEWMAN,

9, DEVONSHIBE ST., BISHOPSGATE.

## INTRODUCTION.

THE principal object of the present Catalogue has been to give a complete list of all the Crustacea that have been recorded as found in Great Britain, indicating at the same time those species that are contained in the collection, and pointing out their peculiarities as regards sex, habitat, and the source from whence the specimens were obtained, as far as the materials in the possession of the Museum will allow. The locality of the specimens, which are not at present contained in the collection, is recorded as given by the authority on which they are inserted.

Those specimens which have been presented to the Museum have the name of the donor indicated. Synonyma have been added to the orders and other divisions of the class, as well as to the genera and species, with a reference to the work in which they have been indicated, and the date, when the different names and divisions were first used, is usually added,

to enable the student to trace the history of the divisions and species, and at the same time to show the priority of the different names which have been employed.

This Catalogue has been prepared by Mr. Adam White, one of the assistants in the department.

JOHN EDWARD GRAY

British Museum, June 15th, 1850.

## CATALOGUE

OF.

# BRITISH CRUSTACEA.

## CLASS CRUSTACEA.

Crustacea, Brisson, Reg. Animale. p. 6 (1756). Insecta-aptera, pt.; Vermes, pt. Linn. Syst. Nat. i. p. 1037, 1092 (1766).

Insecta, pt. Fabr. Syst. Ent. (1775).

Crustacea, Crustaceous Animals, Pennant, Brit. Zool. iv. p. 1 (1777).

Insectes pourvus de machoires, et sans ailes, A. Cuv. Tabl. Elem. (1797).

Crustacés, Cuvier, Leç. Anat. Comp. (1800); Lamarch, Syst. An. sans Vert. p. 143 (1801).

## SUB-DIVISION 1.

CRUST. MAXILLOSA, Latr. Fam. Nat. p. 264 (1825).

Crustacés maxillés, M. Edw. Crust. i. p. 237 (1834). Cancer, pt. Linn. Syst. Nat. i. p. 1038.

## SUB-CLASS I. MALACOSTRACA.

Malacostraca, Latr. Hist. Nat. Crust. v. p. 1 (1803); Leach, Linn. Trans. xi. p. 307.

Agonata, pt. Fabr. Syst. Ent. pp. 400—419 (1775), Synistata, pt. Fabr. Syst. Ent. pp. 296—299 (1775). Mitosata, pt. Fabr. Ent. Syst. p. 396

Mitosata, pt. Fabr. Ent. Syst. p. 396.

Astacoides, Dumeril, Zool, Anal. p. 173 (1806).

## LEGION I. PODOPHTHALMA.

Podophthalma, Leach, Linn. Trans. xi. p. 307 (1814—1815). Podophthalmiens, M. Edw. Crust. i. p. 237. Crustacés Pédiocles, Lam. An. sans Vert. p. 147 (1801).

## ORDER I. DECAPODA.

Decapoda, Latr. Hist. Nat. Crust. v. p. 346 (1803) pt.; Haan, Faun, Jap. Exp. p. 15 (1833).
Decapodes, M. Edw. Crust. i. p. 241.

## SUB-ORDER I. DECAPODA BRACHYURA.

Brachyura, Latr. Fam. Nat. p. 267; Leach, Linn. Trans. xi. p. 307.

Brachyuri, Latr. Hist. Nat. Crust. v. p. 347 (1803). Caneri Brachyuri, Lam. Syst. An. sans Vert. p. 148 (1801).

Brachyures, M. Edw. Crust. i. p. 247.

Kleistagnatha, pt. Fabr. Ent. Syst. Suppl. p. 307 (1798). Tetragonostoma, pt., Macleay, Ill. Annul. S. Afr. p. 54.

Trigonostoma, pt. Macleay, l. c.

## Tribe 1. OXYRHYNCHITA.

Oxyrinehi, pt. Latr. Hist. Nat. Crust. vi. p. 85 (1803). Mucronés on Oxyrinques, Dumeril, Zool. Anal, p. 179 (1806). Oxyrhynches, M. Edw. Crust. i. p. 263. Les Trigones, pt. Lam. Hist. Nat. An. sans Vert. v. p. 234. Trigonia, Latr. Fam. Nat. p. 272 (1825). Majacea, pt. Haan, Faun. Jap. p. 74, 77 (1839). Inachina, pt. Macleau, Ill. Annul. S. Afr. p. 56.

#### FAM. I. MACROPODIADÆ.

Macropodiadæ, pt. Leach, Sam. Ent. U. Comp. p. 90 (1819). Macropodiens, M. Edw. Crust. i. p. 273. Macropus, pt. Latr. Hist. Nat. Crust. vi, p. 108 (1803). Leptopodiadæ, Bell, Brit. Crust. p. 1 (1844). Maiadæ, pt. Leach, Sam. Ent. U. Comp. p. 89. Inachidæ, Macleay, Ill. Annul. S. Afr. p. 56.

#### 1. STENORHYNCHUS.

Stenorhynchus, Lam. Hist. Nat. An. sans Vert. v. p. 236 (1818). Macropus, pt. Latr. Hist. Nat. Crust. vi. p. 108 (1803). Macropodia, Leach, Linn. Trans. xi. p. 331 (1814-1815). Inachus (subg. Stenorhynchus), Haan, Faun. Jap. p. 89. Inachus, pt. Fabr. Ent. Syst. Suppl. p. 355 (1798).

#### 1. Stenorhynchus rostratus. Slender-legged Crab.

Cancer rostratus, Linn. Faun. Suec. p. 2027 (1761); Syst. Nat. p. 1045, 31; Herbst. t. xvi, f. 90.

C. Phalangium, Penn. Brit. Zool. iv. p. 7, t. ix. f. 17 (1777).

Inachus Phalangium, Fabr. Suppl. p. 358.

Macropus Phalangium, Latr. Hist. Nat. Crust. vi. p. 110.

Macropodia Phalangium, Leach, Zool. Misc. ii. p. 18; Linn. Trans. xi. p. 331; Samouelle, Ent. U. Comp. p. 91; Mal. Pod. Brit. t. xxiii. f. 6; Guerin, Icon. R. A. Crust. t. 21, f. 2.

Stenorhynchus Phalangium, M. Edw. Hist. Crust. i. p. 279; Guerin, Icon. Texte. p. 10; Bell, Brit. Crust. p. 2; Lucas, Expl. Alger. p. 4.

British Coast (mouths of rivers and in deep water) from Cornwall to Orkney, Ireland.

a—f. &. Torbay. From collections of Col. Montagu and Dr. Leach.

g, h. Q. Sussex. Presented by J. E. Gray, Esq.

Slender-beaked Spider-Crab. 2. STENORHYNCHUS TENUIBOSTRIS.

Stenorhynchus tenuirostris, Bell, Brit. Crust. p. 6; Thompson, An. Nat. Hist. xx. p. 237.

Leptopodia tenuirostris, Leach, Edinb. Enc. vii. p. 431.

Macropus longirostris, Latr. Hist. Nat. des Crust. viii. p. 110?

Macropodia longirostris, Risso, Hist. Nat. de l'Eur. Merid. v. p. 27 Blainv. Faune Franc. t. 8, f. 1.

Macropodia tenuirostris, Leach, Linn. Trans. xi. p. 331; Mal. Pod. Brit. t. xxiii. f. 1-5.

Cancer longirostris, Fabr. Ent. Syst. ii. p. 462? Cancer rostratus, Fabr. Mant. Ins. i. p. 235, 76?

Stenorhynchus longirostris, Edw. Hist. Crust. i. p. 280; Guer. Icon. R. A. t. 11, f. 3; Couch, Cornish Fauna, p. 64; Lucas, Expl. Alger. p. 5.

a-e. 3. f-j. 2. Devonshire Coast. From the collection of Dr. Leach.

#### 2. ACHÆUS.

Achæus, Leach, Mal. Pod. Brit. Inachus (subg. Achæus), Haan, Faun. Jap. p. 87.

## 1. ACHÆUS CRANCHII. Cranch's Spider-Crab.

Achæus Cranchii, Leach, Mal. Pod. Brit. xxii. C.; Latr. R. A. iv. p. 64; M. Edw. Crust. i, p. 281; Bell, Brit. Crust. p. 10; Lucas, Expl. Alger. p. 5.

a. Falmouth Bay, Cornwall. From the collection of Mr. J. Cranch. S. of Ireland. (J. V. Thompson, Esq.).

#### 3. INACHUS.

Inachus, Leach, Linn. Trans. xi. p. 329. Macropus, pt. Latr. Hist, Nat. Crust. vi. p. 108. Inachus (subg. Inachus), Haan, Faun. Jap. p. 88. Inachus, pt. Fabr. Ent. Syst. Suppl. p. 355.

## 1. INACHUS DORSETTENSIS. Scorpion Spider Crab.

Cancer Dorsettensis, Penn. Brit. Zool. iv. p. 7, t. 9, A. f. 18 (1777). Cancer Scorpio, Fabr. Ent. Syst. ii. p. 462 (1793); Suppl. p. 358; Herbst. i. p. 237, No. 130.

Macropus Scorpio, Latr. Hist, Nat. Crust, vi. p. 109. Inachus Scorpio, Fabr. Suppl. p. 358; Desm. Cons. t. xxiv. f. 1; Guerin, Exp. Morée, p. 31; M. Edw. Crust. i. p. 288; Cuv. R. A. (Croch.) t. 34, f. 2; Couch, Cornish Fauna, p. 65.

Inachus Dorsettensis, Leach. Enc. Brit. Suppl. p. 416; Malac. Brit. t. xxii. f. 1—6; Samouelle, Ent. U. Comp. p. 90; Bell, Brit. Crust. p. 13.

British and Irish Coasts.

a-d. ∂.e-h. ♀. Devon. From the collection of Col. Montagu.

j. Cornwall. Presented by D. W. Mitchell, Esq.

k. Cornwall. Presented by W. P. Cocks, Esq.

## 2. INACHUS DORHYNCHUS. Leach's Spider-Crab.

Inachus Dorynchus, Leach, Ed. Enc. vii. p. 431; Mal. Pod. Brit. t. xxii. f. 7, 8; M. Edw. Crust. p. 288; Couch, Cornish Fauna, p. 65; Bell, Brit. Crust. p. 16.

British and Irish Coasts.

a-f. Devon. From the collection of Dr. Leach.

#### 3. INACHUS LEPTOCHIRUS. Slender-armed Spider-Crab.

Inachus leptochirus, Leach, Malac. Brit. t. xxii. B.; Bell, Brit. Crust. p. 18.

Inachus leptorynchus, Desm. Cons. p. 152.

Inachus leptorinchus, M. Edw. Crust. i. p. 289.

British and Irish Coasts (rare).

a-c. W. Coast of Devon. From the collection of Mr. Cranch.

## FAM. II. MAIADÆ.

Maiadæ, Bell, Brit. Crust. p. 21. Maiadæ, pt. Leach, Sam. Ent. U. Comp. p. 88. Maiens, M. Edw. Crust. i. p. 295.

#### 1. ARCTOPSIS.

Arctopsis (lanata), Lam. Syst. An. sans Vert. p. 155 (1801). Pisa, Leach, Linn. Trans. xi. p. 327 (1814—1815). Pisa, pt. Leach, Edin. Enc. vii. Blastus, pt. Leach, Edin. Enc. vii. Pisa (subg. Pisa), Haan, Faun. Jap. p. 85.

## 1. ARCTOPSIS TETRAODON. Four-horned Spider-Crab.

Cancer tetraodon, Penn. Brit. Zool. iv. t. viii. f. 15, p. 6. Maia tetraodon, Bosc, Hist. Crust. i. p. 254; Leach, Ed. Enc. vii. p. 395.

Maia prædo, Bose, t. c.

Blastus tetraodon, Leach, Ed. Enc. p. 431. Maia hirticorne, Blainv. Faune Franc. t. 9.

Pisa tetraodon, Leach, Linn. Trans. xi. p. 328 (1815); Malav. Pod. Brit. t. xx. f. 1—6; Samouelle, Ent. U. Comp. p. 88; M. Edw. Crust. i. p. 307; Couch, Cornish Fauna, p. 65; Bell, Brit. Crust. p. 22; Lucas, Expl. Alger. p. 7.

a-f. South of England.

q, h. Bognor. Presented by Prof. Bell.
 j-k. Cornwall. Presented by D. W. Mitchell, Esq.

## 2. ARCTOPSIS LANATA. Gibb's Crab.

Arctopsis lanata, Lam. Syst. An. sans Vert. p. 155 (1801). Cancer biaculeatus, Montagu, Linn. Trans. xi. t. 1, f. 2, p. 2 (1807—1815).

Pisa biaculeata, Leach, Ed. Enc. vii. p. 431.

Pisa Gibbsii, Leach, Linn. Trans. xi. p. 327 (1815); Malac. Pod. Brit. t. xix. f. 1—4; Samouelle, Ent. U. Comp. p. 88; M. Edw. Crust. i. p. 307; Couch, Cornish Fauna, p. 65; Bell, Brit. Crust. p. 27; Lucas, Expl. Alger. p. 8.

British Coast (deep water).

a-l. South Coast of Devon and Cornwall. From the collections of Col. Montagu and Dr. Leach.

## 2. HYAS.

Hyas, Leach, Edin. Enc. vii. p. 431. Pisa (subg. Hyas), Haan, Faun. Jap. p. 85. Inachus, pt. Fabr. Suppl. p. 356.

## 1. HYAS ARANEUS. Great Spider-Crab.

Cancer araneus, Linn. Syst. Nat. p. 1044, 30; Penn. Brit. Zool. iv. p. 6, t. 9, f. 16.

Cancer Buso, Herbst, i. t. xvii. f. 95, p. 342. Inachus araneus, Fabr. Ent. Syst. Suppl. p. 356.

Maia araneus, Leach, Ed. Enc. vii. p. 394.

Hyas araneus, Leach, l. c. p. 431; Mal. Pod. Brit. t. xxi. A., f. 1-5; Samouelle, Ent. U. Comp. p. 89; Desm. Crust. p. 148; M. Edw. Crust. i. p. 312; Couch, Cornish Fauna, p. 66; Bell, Brit. Crust. p. 31.

a—k. British Coast (Scotland and Kent). From the collection of Dr. Leach.

#### 2. Hyas coarctatus. Contracted Crab.

Hyas coarctatus, Leach, Linn. Trans. xi. p. 329; Mal. Pod. Brit. t. xxi. B., f. 1, mas. 2 fæm.; Desm. Cons. p. 148; M. Edw. Crust. i. p. 312; Couch, Cornish Fauna, p. 66; Bell, Brit. Crust. p. 35.

Hyas serratus, Hailstone, Mag. Nat. Hist. viii. (junr.)

British Coast from Cornwall to Shetland. Ireland.

a—g. Firth of Forth. From the collection of Dr. Leach.

h—p. Devon and Kent.

#### 3. MAJA.

Maja, Leach, Linn. Trans. xi. p. 326. Maïa, pt. Lam. Hist. Nat. An. sans Vert. v. 240. Maja, pt. Lam. Syst. An. sans Vert. 154 (1801). Maja (subg. Maja), Haan, Faun. Jap. p. 82. Inachus, pt. Fabr. Ent. Syst. Suppl. p. 356.

## 1. MAJA SQUINADO. Thorn-back Crab.

Cancer maia, Linn. Faun. Suec. p. 493, 2031; Syst. Nat. 1046, 41; Sowerby, Brit. Misc. t. 39.

Cancer Squinado, Herbst, i. t. xiv. f. 84, 85 (jun.); Id. iii. t. lvi. (adult).

Cancer horridus, Penn. Brit. Zool. iv. p. 6, t. 8, f. 14.

Maia Squinado, Latr. Hist. Nat. des Crust. vi. p. 93; Bosc, Hist. Nat. des Crust. i. p. 257; Leach, Linn. Trans. xi. p. 326; Mal. Pod. Brit. t. xviii. f. 1—6; Samouelle, Ent. U. Comp. p. 89: M. Edw. Crust. i. p. 327; Cuv. R. A. (Croch.) t. 30, f. 2; Bell, Brit. Crust. p. 39.

Maia verrucosa, Couch. (not Edw.).

Thornback, King Crab, Corwich, Spider (local names).

British Coast.

a. South Coast of England. Presented by J. G. Children, Esq.

b-h. South-west Coast of Devon.

j—l. Cornwall. Presented by D. W. Mitchell, Esq. m. Cornwall. Presented by W. P. Cocks, Esq.

## FAM. III. PARTHENOPIDÆ.

Parthenopiens, M. Edw. Crust. i, p. 347. Parthenopidæ, Bell, Brit. Crust. p. 45. Maiadæ, pt. Leach, Sam. Ent. U. Comp. p. 88.

#### 1. EURYNOME.

Eurynome, Leach, Edin. Enc. vii. p. 431. Doclea (subg. Eurynome), Haan, Faun. Jap. p. 86. Cancer, pt. Pennant.

## 1. EURYNOME ASPERA. Strawberry Crab.

Cancer asper, Penn. Brit. Zool. iv. (edit. 1777), p. 7, t. 9. A., f. 20.

Eurynome aspera, Leach, Mal. Pod. Brit. t. xvii. f. 1—5; Samouelle, Ent. U. Comp. p. 88; Guerin, Icon. R. A. Crust. t. 7, f. 4; M. Edw. Crust. i. p. 351, t. 15, f. 18; Thompson, An. Nat. Hist. xx. p. 238; Bell, Brit. Crust. p. 46.

Eurynome spinosa, Hailstone, in Mag. Nat. Hist. viii. p. 549, (iunr.)

Eurynome scutellata, Risso, Hist. Nat. Eur. Mer. iv. 21? var.? fid. Thompson.

British Coast (deep water).

a-o. Plymouth Sound. From the collections of Col. Montagu and Dr. Leach.

## Tribe 2. CYCLOMETOPITA.

Cyclométopes, M. Edw. Crust, i. p. 363. Arcuata, pt. Latr. Fam. Nat. p. 270 (1825). Canceriformes ou Carcinoides, pt. Dumeril, Zool. Anal. p. 181. Cancroidea, pt. Haan, Faun. Jap. i. (1833).

#### FAM. I. CANCERIDÆ.

Canceridæ, Bell, Brit. Crust. p. 51. Canceriens, M. Edw. Crust. i. p. 368. Cancerides littorales, Latr. Gen. Cr. et Ins. i. p. 27. Canceridæ, pt. Leach, Sam. Ent. U. Comp. p. 85. Pilumnidæ, pt. Leach, Sam. Ent. U. Comp. p. 86.

#### 1. XANTHO

Xantho, Leach, Linn. Trans. xi. p. 320 (1814, 1815). Cancer (subg. Xantho), Haan, Faun. Jap. p. 18. Cancer, pt. Montagu.

## 1. XANTHO FLORIDA. Montagu's Crab.

Cancer floridus, Montagu, Linn. Trans. ix. p. 85, t. 4, f. 1, (not Linn.)

Cancer poressa, Olivi, Zool. Adr. t. 2, f. 3?

Cancer incisus, Leach, Ed. Enc. vii. p. 391. Xantho incisa, Leach, Ed. Enc. vii. p. 430.

Xantho florida, Leach, Linn. Tr. xi. p. 320; Leach, Mal. Pod. Brit. t. xi. f. 1-6; Samouelle, Ent. U. Comp. p. 86; Bell, Brit. Crust. p. 51.

Xantho floridus, M. Edw. Crust. i. p. 394; Cuv. R. A. (Croch.) t. 11, bis. f. 13; Lucas, Expl. Alger. p. 12.

Cancer (Xantho) rivulosus, Haan, Faun. Jap. p. 18.

British and Irish Coasts.

a-g. South Coast of Devon. From the collections of Col. Montagu and Dr. Leach.

j—l. Cornwall. Presented by D. W. Mitchell, Esq.
 m. Cornwall. Presented by W. P. Cocks, Esq.

#### 2. XANTHO RIVULOSA. Risso's Crab.

Xantho rivulosa, Bell, Brit. Crust. p. 54. Cancer hydrophilus, Herbst, i. t. xxi. f. 124, p. 266?

Cancer rivulosus, Risso, Crust. Nice. p. 14 (1816).

Xantho florida, var. β., Leach, Trans. Linn. Soc. xi. p. 320.
Xantho rivulosus, Savigny, l'Egypte, t. 5, f. 8; M. Edw. Crust. i. p. 394; Roux, Crust. Mediterr. t. xxxv.; Couch, Cornish Fauna; Lucas, Expl. Alger. p. 12.

Cancer cinereus, Guerin, Exp. Morée. p. 30.

British and Irish Coasts.

a. Cornwall (Falmouth). Presented by W. P. Cocks, Esq.

## 2. CANCER.

Cancer, Latr. Syst. An. sans Vert. p. 148 (1801); Leach, Linn. Trans. xi. 320 (1814—1815). Platycarcinus (Latr. mss.), M. Edw. Crust. i. p. 412. Cancer (subg. Cancer). Haan, Faun. Jap. p. 20.

#### 1. CANCER PAGURUS. Common Crab.

Cancer Pagurus, Linn. Syst. Nat. p. 1044, 27; Herbst, i. t. ix. f. 59; Penn. Brit. Zool. edit. 1777, iv. t. iii. f. 7; Leach, Mal. Pod. Brit. t. x. f. 1—4; Samouelle, Ent. U. Comp. p. 85; Bell, Trans. Zool. Soc. i. p. 341; Brit. Crust. p. 59; Haan, Faun. Jap.

Cancer fimbriatus, Olivi, Zool. Adr. p. 47, t. 1 (1792).
Cancer (Cancer) Pagurus, Haan, Faun. Jap. 21.
Platycarcinus Pagurus, M. Edw. Crust. i. p. 413.
Cancer inciso-crenatus, Couch, Cornish Fauna, p. 70 (young).

Crab, or Partan (local names).

British Coasts, from Cornwall to Shetland.

a-k. Devon. From the collections of Col. Montagu and Dr. Leach.

 London Market; a specimen covered with old oysters. Presented by Messrs. Oliffe and Cole.

m. Corpwall. Presented by D. W. Mitchell, Esq.

#### 3. PILUMNUS.

Pilumnus, Leach, Linn. Trans. xi. p. 32, (1814, 1815). Cancer (subg. Pilumnus) Haan, Faun. Jap. p. 19.

## 1. PILUMNUS HIRTELLUS. Hairy Crab.

Cancer hirtellus, Linn. Faun. Suec. p. 2029; Syst. Nat. i. 1045, 32; Penn. Brit. Zool. iv. t. vi. p. 11, f. 11. Cancer ferrugineus, Herbst, t. 21, f. 127?

Pilumnus hirtellus, Leach, Linn. Trans. xi. p. 321; Mal. Pod. . Brit. t. xii. f. 1-7; Samouelle, Ent. U. Comp. p. 86; M. Edw. Crust. i. p. 417; Bell, Brit. Crust. p. 68.

Cancer (Pilumnus) hirtellus, Haan, Faun. Jap. p. 19.

British and Irish Coasts.

a-l. S. Devon. From the collections of Col. Montagu and Dr. Leach.

m-n. Sussex. Presented by J. E. Gray, Esq.

Presented by D. W. Mitchell, Esq. and W. v—s. Cornwall. P. Cocks, Esq.

#### 4. PIRIMELA.

Pirimela, Leach, Mal. Pod. Cancer, pt. Montagu. Corystes (subg. Pirimela), Haan, Faun. Jap. p. 13.

#### 1. PIRIMELA DENTICULATA. Toothed Pirimela.

Cancer denticulatus, Mont. Linn. Trans. ix. p. 87, t. 2, f. 2. Pirimela denticulata, Leach, Mal. Brit. t. iii. f. 1-7; Desm. Crust. t. 9, f. 1; M. Edw. Crust. i. p. 424; Cuv. R. A. (Croch.) t. 12, f 1; Bell, Brit. Crust. p. 72; Lucas, Expl. Alger. p. 12. Corystes (Pirimela) denticulata, Haan, Faun. Jap. p. 13.

a-h. South Coast of Devon and Kent. From the collections of Col. Montagu and Dr. Leach.

i. Scotland.

k. Cornwall. Presented by D. W. Mitchell, Esq.

## FAM. IL PORTUNIDE.

Participe, Louis, Sam. End. U. Comp. p. 83 (1819); Bell, Brit. Creat. p. 74.
Perturbines, M. Edin. Creat. i. p. 422.
Participes, pt. Fide. End. Sant. Suppl. p. 263 (1788).
Cancerndes Pelagis, Lair. Gra. Creat. et End. i. p. 22.
Plandpolla, Lair.
Perturbine, pt. Markop, El. Annal, S. Afr. p. 59.
Carcinida, pt. Markop, El. Annal, S. Afr. p. 59.
Shunfa, et Fio Crabs fiscal manus).

#### L CARCINES.

Caroline, Lond, Line, Tome, 21 p. 314. Curyetes (subg. Carolines), Hann, Fran, Jap. p. 13. Caroce, Aust.

## L. Cattersus Manas. Common Shore-Crab.

Cancer Morne, Line. First. Sure. p. 2026; Spit. Nat. p. 1043, 22; Frank. Berk. Link. p. y. 3; edit. 1777, t. 2, 6.5; Herbet, i. t. 7, f. 65; Blance. Fenne Franç. t. I., f. l. L. Pertarus mornes, Linet. Ed. Enc. vo. p. 200.
Carrisons mornes, Linet. Ed. Enc. p. 620; Line. Trans. xi. p. 314.
Mal. Pad. Soci. t. v. f. 1—7; M. Ede. Cract. i. p. 434; Bell. Best Cract. p. 75; Gould. Inc. Man. p. 221, 2; Delay, Zeol. N. York vi. p. 8; Lacen. Expl. Algor. p. 13.
Vin. f. C. grannings, Sep. Journ. And. Sc. Phil. i. p. 61.

British Class, everywhere.

and Sandgate, Kent. From ald collection.

The Command. Presented by D. W. Muchell, Esq.

a. Van Brigham. Presented by Mc W. Wing.

## 2 PORTUNES.

Proposes, Lock, Rd. Dec. of p. 101.
Perpendies, Low N. Dec. of Stat. Not.; Enc. Mark v. p. 151.
Correspondence (subp. Proposednes), Elsen, Fount Jap. p. 12.
Cassen, pt. Press.

## 1. PORTUMNUS LATIPES. Pennant's Swimming-Crab.

Cancer latipes, Penn. Brit. Zool. iv. p. 3, t. 1, edit. 1777, f. 4. Herbst. t. 21, f. 126.

Portumnus variegatus, Leach, Ed. Enc. vii. p. 391; Mal. Pod. Brit. t. iv. f. 1-6; Linn. Trans. xi. p. 314; Samouelle, Ent. U. Comp. p. 84; Bell, Brit. Crust. p. 85.
Portune varié, Blainv. Faun. Franç. t. 4, f. 2.

Corystes (Platyonichus) variegata, Haan, Faun. Jap. p. 12.

Platyonichus depurator, Latr. Enc. Meth. x. p. 153.

Platyonichus latipes, M. Edw. Crust. i. p. 436; Lucas, Expl. Alger. p. 14.

a-e. Devon. From the collections of Col. Montagu and Dr. Leach.
 f.-h. (Young). S. of England. Presented by Dr. Goodall

## 3. POLYBIUS.

Polybius, Leach, Mal. Pod. Platyonichus, pt. Latr. Corystes (subg. Polybius), Haan, Faun. Jap. p. 11.

j. Torbay. Presented by J. R. Griffiths, Esq.

## 1. Polybius Henslowii. Henslow's Swimming-Crab.

Polybius Henslowii, Leach, Mal. Pod. Brit. t. ix. B., f. 1—4; M. Edw. Crust. i. p. 439; Bell, Brit. Crust. p. 116.
Platyonychus Henslowii, Latr. Enc. Meth. x. p. 152.
Corystes (Polybius) Henslowii, Haan, Faun. Jap. p. 12.
Cancer depurator, Solander, Banks, Drawings, iii. t. 8.
a—c. Devon. From the collection of Dr. Leach.

d. Cornwall. Presented by D. W. Mitchell, Esq.

#### 4. PORTUNUS.

Portunus, Leach, Linn. Trans. xi. p. 315. Portunus. pt. Fabr. Ent. Syst. Suppl. p. 263. Portunus, (subg. Portunus), Haan, Faun. Jap. p. 9. Cancer, pt. Linn. Syst. Nat.

Swimming-Crabs (local name). Flying-Crabs (local name). Fiddlers (local name).

#### 1. PORTUNUS PUBER. Velvet Crab.

Cancer puber, Linn. Syst. Nat. i. p. 1046, 40.

Cancer velutinus, Penn. Brit. Zool. iv. p. 4, t. iv. f. 8; Herbst, i. t. 7, f. 49.

Portunus puber, Leach, Mal. Pod. Brit. t. vi.; Samouelle, Ent. U. Comp. p. 84; Blainv. Faune Franç. t. 4, f. 1; M. Edw. Crust. i. p. 441; Cuv. R. A. (Croch.) t. x. f. 2; Latr. R. A. iv. p. 35; Bell, Brit. Crust. p. 90.

Portunus velutinus, Haan, Faun. Jap. p. 9.

a-f. Devon. From the collections of Col. Montagu and Dr. Leach.

g-j. Cornwall. Presented by D. W. Mitchell, Esq.

## 2. Portunus corbugatus. Wrinkled Swimming-Crab.

Cancer corrugatus, Penn. Brit. Zool. edit. 1777, iv. p. 5, t. v. f. 9,

p. 5; Herbst, t. vii. f. 50.

Portunus corrugatus, Leach, Ed. Enc. vii. p, 390; Linn. Trans. xi. p. 315; Mal. Pod. Brit. t, vii. f. 1, 2; Samouelle, Ent. U. Comp. p. 85; Haan, Faun. Jap. 9; M. Edw. Crust. i. p. 443; Latr. R. A. iv. p. 35; Bell, Brit. Crust. p. 94; Lucas, Expl. Alger. p. 14.

British Coast

a-c. Plymouth Sound. From the collection of Col. Montagu.

#### 3. PORTUNUS RONDELETII.

Portunus Rondeleti, Risso, Crust. Nice. p. 26, t. 1, f. 3 (1816); Id. Hist. Nat. de l'Eur. Mérid. v. p. 2; Haan, Faun. Jap. p. 9;

M. Edw. Crust. i, p. 444; Lucas, Expl. Alger. p. 15.
Portunus arcuatus, Leach, Mal. Pod. Brit. t. vii. f. 5, 6; Edin.
Enc. vii. p. 390; Thompson, Ann. and Mag. Nat. Hist. x. p. 283;
Bell, Brit. Crust. p. 97.

Var. with notched front.

Portunus emarginatus, Leach, Mal. Pod. Brit. t. vii, f. 3, 4.

a, b. Sussex. Presented by J. E. Gray, Esq.

c. S. W. Coast of Devon.

#### 4. Portunus longipes?

Portunus longipes, Risso, Crust. Nice. t. 1, f. 5; M. Edw. Crust. i. p. 444.

Portunus infractus, Otto. Acad. Nat. Cur. xiv. t. 20, f. 1.

a. Cornwall. Presented by W. P. Cocks, Esq.

#### 5. PORTUNUS DEPURATOR.

Cancer depurator, (?) Linn. Syst. Nat. p. 1043, 23.
Cancer depurator, var., Penn. Brit. Zool. edit. 1777, t. ii. iv. f. 6, p. 4.

Portunus depurator, Leach, Ed. Enc. vii. p. 390; Linn. Trans. xi. p. 317; Mal. Pod. Brit. t. ix. f. 1, 2; Bell, Brit. Crust. p. 101.

Portunus plicatus, Risso, Crust. Nice. p. 29; Hist. Nat. de l'Eur. Mérid. v. p. 3; M. Edw. Crust. i. p. 442; Lucas, Expl. Alger. p. 14.

a—p. S. England. From the collections of Col. Montagu and Dr. Leach.

q. Sussex. Presented by J. E. Gray, Esq.

#### 6. Portunus marmoreus. Marbled Fin-Crab.

Portunus marmoreus, Leach, Ed. Enc. vii. p. 390; Mal. Pod. Brit. t. viii. f. 1—6; Samouelle, Ent. U. Comp. p. 85; M. Edw. Crust. i. p. 442; Bell, Brit. Crust. p. 105.

Cancer (pinnatus) marmoreus, Montagu's MSS.; Leach, l. c.

a-e. Falmouth.

f.—g. S. Devon, between Torcross and the R. Ex. From the collections of Col. Montagu and Dr. Leach.

#### 7. PORTUNUS HOLSATUS.

Portunus holsatus, Fabr. Ent. Syst. Suppl. p. 336; Haan, Faun. Jap. p. 9; M. Edw. Crust. i. p. 442; Bell, Brit. Crust. p. 109. Portunus lividus, Leach, Mal. Pod. Brit. t. ix. f. 3—4.

a-d. Sandgate. From the collection of Col. Montagu.

e. Firth of Forth (Newhaven).

#### 8. PORTUNUS PUSILLUS.

Portunus pusillus, Leach, Linn. Trans. xi. p. 318; Mal. Pod. Brit. t. ix. f. 5—8; Haan, Faun. Jap. p. 9; M. Edw. Crust. i. p. 444; Bell, Brit. Crust. p. 112.

Portunus maculatus, Risso, Hist. Nat. Eur. Mér. v. p. 5; Roux, Crust. Med. t. xxxi.

a-n. South Coast of Devon and Firth of Forth. From the collections of Col. Montagu and Dr. Leach.

#### Tribe 3. CATOMETOPITA.

Catometopes, M. Edw. Crust. ii. p. 1.
Canceriformes ou Carcinoides, pt. Dumeril, Zool. Anal. p. 181 (1806).
Quadrilatera, Latr. Fam. Nat. p. 269 (1825).
Cancroidea, pt. Hann, Faun. Jap. p. 1 (1833).

#### FAM. I. PINNOTHERIDÆ.

Pinnotheridæ, Bell, Brit. Crust. p. 119. Pinnothériens, M. Edw. Crust. ii. p. 28. Cancerides vigiles, pt. Latr. Gen. Cr. et Ins. i. p. 34. Ocypodaidæ, pt. Leach, Sam. Ent. U. Comp. p. 86. Pinnotheridea, Haan, Faun. Jap. p. 5.

Pea-Crabs (local name).

#### 1. PINNOTHERES.

Pinnotheres, Latr. Hist. Nat. Crust. vi. p. 78. Cancer, pt... Penn.

#### 1. PINNOTHERES PISUM. Common Pea-Crab.

Cancer Pisum, Penn. Brit. Zool. edit. 1777, iv. t. 1, f. 1, p. 1; Herbst, i. p. 95, t. 2, f. 21; Fabr. Ent. Syst. Suppl. p. 343. Pinnotheres Pisum, Latr. Hist. Nat. des Crust. vi. p. 83; Leach, Mal. Pod. Brit. t. xiv. f. 2, 3 (fem.); W. Thompson, F.L.S. Ent. Mag. iii. pp. 85—90, f. 3 (1 & 2 Zoe. of Pinnotheres); Haan, Faun. Jap. p. 35; M. Edw. Crust. ii. p. 31; Bell, Brit. Crust. p. 121.

Pinnotheres Cranchii, Leach, Mal. Pod. Brit. t. 14, f. 4, 5 (fem.); Samouelle, Ent. U. Comp. p. 87; Haan, Faun. Jap. p. 35.

Pinnotheres Latreillii, Leach, l. c. f. 6, 7, 8 (mas. immat.?); Haan, Faun. Jap. p. 35.

Pinnotheres varians, Leach, l. c. f. 9, 10, 11 (mas.).

Cancellus mytulorum, Baster, Opuscula Subseciva, ii. 46, t. 4, f. 1, 2.

British Coast.

a—n. Scotland, Ireland, and England. From the collections of Col. Montagu and Dr. Leach.
o—p. Cornwall. Presented by D. W. Mitchell, Esq.

#### 2. PINNOTHERES VETERUM. Pinna Pea-Crab.

Pinnotheres veterum, Bosc, Hist. Nat. des Crust. i. p. 243; Leach, Mal. Pod. Brit. t. xv. f. 1—5; Haan, Faun. Jap. p. 35; M. Edw. Crust. ii. p. 32, t. 19, f. 7, 8; Bell, Brit. Crust. p. 126; Lucas, Expl. Alger. p. 17.

Pinnotheres Pinnæ, Leach, Ed. Enc. vii. p. 431; W. Thompson, F.L.S. Ent Mag. iii. p. 89.

Pinnotheres Montagui, Leach, Mal. Pod. Brit. t. xv. f. 6; Haan, Faun. Jap. p. 35; M. Edw. Crust. p. 32.

Pinnotheres modioli, Leach, Ed. Enc. vii. p. 431.

a—d. Salcombe and Kingsbridge Estuaries, in the shells of Pinna ingens, Mytilus modiolus, and Ostrea edulis. From the collections of Col. Montagu and Mr. Cranch.

## FAM. II. GONOPLACIDÆ.

Gonoplacidæ, Macleay, Ill. Annulosa, S. Afr. p. 63; Bell, Brit. Crust. p. 129.

Gonoplaciens, M. Edw. Crust. ii. p. 56.

Ocypodaidæ, pt. Leach, Sam. Ent. U. Comp. p. 86.

Deep Shore Crabs, Macleay, l. c.

#### 1. GONOPLAX.

Gonoplax, Leach, Linn. Trans. xi. 323 (1814, 1815). Goneplax, pt. Lam. Hist. An. sans Vert. v. 254 (1818). Cancer (subg. Gonoplax), Haan, Faun. Jap. p. 19. Ocypoda, pt. Lam. Syst. An. sans Vert. p. 150 (1801).

## 1. GONOPLAN ANGULATA. Angular Crab.

Cancer angulatus, Penn. Brit. Zool. iv. pl. 5, f. 10, p. 5; Fabr. Suppl. p. 341; Herbst, t. 1, f. 13.

Ocypoda angulata, Bose, Hist. Nat. des Crust. i. p. 198; Latr.

Hist. Nat. des Crust. &c. vi. p. 44.

Gonoplax angulata, Leach, Ed. Enc. vii. p. 430; M. Edw. Crust. ii. p. 61; Couch, Cornish Fauna, p. 72; Bell, Brit. Crust. p. 130.

Cancer (Gonoplax) angulatus, Haan, Faun. Jap. p. 20.

Gonoplax bispinosa, Leach, Mal. Pod. Brit. t. xiii.; Samouelle, Ent. U. Comp. p. 87.

Gelasimus Bellii, Couch, Cornish Fauna, p. 73? Gonoplax rhomboides, Roux, Edwards, &c. var.?

British Coast.

a-j. Plymouth Sound, Salcomb, Weymouth, Anglesea (Red Wharf). From the collections of Col. Montagu and Dr. Leach.

k-l. Cornwall. Presented by D. W. Mitchell, Esq.

## FAM. III. GRAPSIDÆ.

Grapsidæ, Bell, Brit. Crust. p. 132. Grapsoïdiens, M. Edw. Crust. ii. p. 68.

## 1. PLANES.

Planes, Leach, Bowdich, Exc. in Madeira and Porto Santo; Bell, Brit. Crust. p. 133.

Nautilograpsus, M. Edw. Crust. ii. p. 89.

Grapsus, sp. Latr. Cancer, sp. Linn.

Cancellus, Sloane.

#### 1. PLANES LINN EANA. Floating Crab.

Cancellus marinus minimus quadratus, Sloane, Jam. ii. p. 270, t. ccxlv. f. 1?

Cancer Cantonensis, Linn. Iter. Westrog. t. 3, f. 1?

Grapsus testudinum, Roux, Crust. Mediterr. t. vi. f. 1—6?

Cancer minutus, Fabr. Syst. Ent. xi. p. 443; Suppl. 343; Herbst, i. t. 2, f. 32?

Grapsus minutus, Latr. Hist. Nat. Crust. vi. p. 68?

Grapsus cinereus, Say, Journ. Acad. Sc. Phil. p. 99?

Nautilograpsus minutus, M. Edw. ii. p. 90.

Planes Linnæana, Leach, MSS. Brit. Mus.; Bell, Brit. Crust. p. 135.

British Coast (accidental).

a—c. Devonshire? From the collection of Dr. Leach.

#### Tribe 4. OXYSTOMATITA.

Oxystomes, M. Edw. Crust. ii. p. 96. Oxystomata, pt. Haan, Faun. Jap. p. 118. Oxyrynchi, pt. Latr. Gen. Cr. et Ins. i. p. 35. Mucronés ou Oxyrinches, pt. Dumeril, Zool. Anal. p. 179. Orbiculata, pt. Latr. Fam. Nat. p. 271. Trigonostoma, pt. Macleay, Ill. Annul. S. Afr. p. 69.

## FAM. I. LEUCOSIADÆ.

Leucosiadæ, Leach, Sam. Ent. U. Comp. p. 91; Bell, Brit. Crust. p. 139.
Leucosiens, M. Edw. Crust. ii. p. 118.
Leucosidea, Haan, Faun. Jap. p. 129.
Leucosina, Macleay, Ill. Annul. S. Afr. p. 70.

#### 1. EBALIA.

Ebalia, Leach, Zool. Misc. iii. Cancer, sp. Penn.

#### 1. EBALIA TUBEROSA. Pennant's Nut-Crab.

Cancer tuberosus, Penn. Brit. Zool. iv. t. ix. a. f. 19.
Ebalia Pennantii, Leach, Mal. Pod. Brit. t. xxv. f. 1—6; Zool.
Misc. iii. p, 19; Bell, Brit. Crust. p. 141.

Ebalia tuberosa, White, List of Crust. in Brit. Mus. p. 50.

a—k. Devou (Kingsbridge). From the collections of Col. Montagu and Dr. Leach.

## 2. EBALIA TUMEFACTA. Bryer's Nut-Crab.

Cancer tumefactus, Mont. Linn. Trans. ix. p. 86, t. 11, f, 3 (fcm. auct.).

Ebalia Bryerii, Leach, Mal. Pod. Brit. t. xxv. f. 12, 13; Zool. Misc. iii. p. 20; Bell, Brit. Crust. p. 145.

a—c. Weymouth (deep water). From the collection of Col. Montagu.

#### 3. EBALIA CRANCHII. Cranch's Nut-Crab.

Ebalia Cranchii, Leach, Mal. Pod. Brit. t. xxv. f. 7-11; Zool. Misc. iii. p. 20; M. Edw. Crust. ii. p. 129; Bell, Brit. Crust. p. 148.

a-k. Plymouth Sound (deep water). From the collections of Mr. Cranch, Col. Montagu, and Dr. Leach.

## FAM. II. CORYSTIDÆ.

Corystidæ, Leach, Samouelle, Ent. U. Comp. p. 82 (1819); Bell, Brit. Crust. p. 151.
Corystiens, M. Edw. Crust. ii. p. 139.
Orbiculata, pt. Latr. Fam. Nat. p. 271.
Arcunta, pt. Latr. Fam. Nat. p. 270.
Cancroidea, pt. Han, Faun. Jap. p. 1-4 (1833).

## 1. ATELECYCLUS.

Atelecyclus, Leach, Linn. Tr. xi. p. 312. Cancer (Hippa), Montagu. Corystes (subg. Clorodius), Haan, Faun. Jap. p. 13.

#### 1. ATELECYCLUS SEPTEMDENTATUS. The Face-Crab.

Cancer (Hippa) septemdentatus, Mont. Linn. Trans. xi. t. 1, f. 1.
Atelecyclus septemdentatus, Leach, Ed. Enc. vii. p. 430; Linn.
Trans. Soc. xi. p. 313.

Corystes (Clorodius) 7-dentata, Haan, Faun. Jap. p. 14.

Atelecyclus heterodon, Leach, Mal. Pod. Brit. t. ii. f. 1-4; Samouelle, Ent. U. Comp. p. 83; Bell, Brit. Crust. p. 153.

Old Man's-Face Crab (local name, Devon).

a—e. Bell Rock, Scotland. Presented by R. Stevenson, Esq., C.E.

f.—k. Coast of Devon. From the collections of Col. Montagu and Dr. Leach.

#### 2. THIA.

Thia, Leach, Linn. Trans. xi. p. 312. Corystes (subg. Thia), Haan, Faun. Jap. p. 14.

#### 2. THIA POLITA. Polished Crab.

Thia polita, Leach, Linn. Trans. xi. p. 312; Zool. Misc. ii. t. 103; Guer. Icon. R. A. Crust. t. 2, f. 3; M. Edw. Crust. ii. p. 144. Cancer residuus, Herbst, p. 3, 53, t. 48, f. 1??? Corystes (Thia) polita, Haan, Faun. Jap. p. 14.

a. Ireland (Roundstone, Connemara). Presented by Dr. Scouler.

#### 2. CORYSTES.

Corystes, Latr. Hist. Nat. Crust. vi. p. 121 (1803). Corystes (subg. Corystes), Haan, Faun. Jap. p. 15. Albunea, sp. Fabr. Ent. Syst. Suppl. p. 397. Cancer, sp. Penn.

## 2. Corystes cassive Launus. Pennants's Long-armed Crab.

Cancer cassivelaunus, *Penn. Brit. Zool.* edit. 1777, iv. t. 7, p. 5, f. 13; *Herbst*, i. t. xii. f. 72. 3. Cancer personatus, *Herbst*, t. xii. f. 71. 2.

Albunea dentata, Fabr. Ent. Syst. Suppl. 398; Lam. Syst. An. sans Vert. p. 156.

Corystes dentatus, Latr. Hist. Nat. Crust. et Ins. vi. p. 122. 2.; M. Edw. Crust. ii. p. 148; Cuv. R. A. (Croch.) t. 23, f. 1; Couch, Cornish Fauna, p. 74.

Corystes personatus, Guerin, Icon. R. A. Crust. t. 6, f. 3.

Corystes (Corystes) dentata, Haan, Faun. Jap. p. 15.

Corystes cassivelaunus, Leach, Ed. Enc. vii. p. 395; Mal. Pod. Brit. t. 1, f. 1-5; Samouelle, Ent. U. Comp. p. 83; Bell, Brit. Crust. p. 159.

Corystes longimanus, Latr. Gen. Cr. et Ins. i. 40. 3.

a-g. Devonshire Coast. From the collections of Col. Montagn and Dr. Leach.

h. Sussex. Presented by J. E. Gray, Esq.

# SUB-ORDER II. DECAPODA ANOMOURA.

Anomoures, M. Edw. Crust. ii. p. 163. Kleistagnatha, pt. Fabr. Ent. Syst. Suppl. p. 307, (1798). Exochnata, pt. Fabr. Ent. Syst. Suppl. p. 372 (1798).

## Tribe 1. APTERURITA.

Apterures, M. Edw. Crust. ii. p. 168. Dromiacea, pt. Haan, Faun. Jap. p. 102. Carcinoides, pt. Dumeril, Zool. Anal. Trigonostoma, pt. Macleay, Ill. Annulosa S. Afr. p. 69.

### FAM. I. DROMIADÆ.

Dromiens, M. Edw. Crust. ii. p. 168. Cancerides littorales, Latr. Gen. Cr. et Ins. i. p. 27. Notopoda, pt. Latr. Fam. Nat. p. 273. Dromiina, Macleay, Ill. Annulosa S. Afr. p. 71.

### 1. DROMIA.

Dromia, Fabr. Ent. Syst. Suppl. p. 359. Cancer, sp. Linn.

### 1. DROMIA VULGARIS. Sponge-Crab.

Dromia vulgaris, M. Edw. Crust. ii. p. 173, t. 21, f. 5—8; Cuv. R. A. (Croch.) t. 40, f. 1; Newman, Zoologist, 1848, p. 2325. Cancer Dromia, Olivi, Zool. Adr. p. 45.
Dromia Rumphii, Desm. Cons. p. 137; Blainv. Faune Franç. t. 7, f. l.
Dromia mediterranea, Leach, Gray, Zool. Journ. i. p. 419.

a. Billingsgate Market, among Oysters, from Whitstable, Essex. Presented by J. E. Gray, Esq., 1825; also found at Beachyhead, Sussex, by G. Ingall, Esq., 1848.

# FAM. II. LITHODIADÆ.

Lithodiadæ, Leach, Sam. Ent. U. Comp. p. 90. Homoliens, M. Edw. Crust. ii. p. 180. Homoladæ, Bell, Brit. Crust. p. 163. Oxyrynchi, pt. Latr. Gen. Crust. et Ins. i. p. 39. Trigona, pt. Latr. Fam. Nat. p. 272.

Cancer caput-mortuum, L. ?

#### 1. LITHODES.

Lithodes, Latr. Gen. Cr. et Ins. i. p. 39 (1806). Parthenope, sp. Fabr. Inachus, sp. Fabr. Cancer, sp. Linn.

### 1. LITHODES MAJA. Northern Stone-Crab.

Cancer maja, Linn. Syst. Nat. p. 1046, 41; Herbst, i. t. xv. f. 87, p. 219.
Cancer horridus, Penn. Brit. Zool. iv. p. 6, pl. viii. f. 14.
Parthenope maia, Fabr. Ent. Syst. Suppl.
Inachus maia, Fabr. Suppl. p. 358.
Cancer spinosus, Ascanius, Icon. iv. p. 6, t. 40.
Maia vulgaris, Latr. Hist. Nat. Crust. vi. p. 96.
Lithodes arctica, Latr. Gen. Crust. et Ins. i. p. 40; M. Edw. Crust. ii. p. 186; Guer. Icon. R. A. t. 12, f. 1; De Kay, Zool. New York, pt. 6, p. 17, t. 6, f. 11.

Lithodes maia, Leach, Linn. Trans. xi. p. 332; Mal. Pod. Brit. t. xxiv. f. 1-4; Bell, Brit. Crust. p. 165.

Trold Krabe, Pontopp. Norg. ii. p. 276 (tab.) 1753.

a, b. Yorkshire Coast. From the collection of Dr. Leach.

c. Firth of Forth (young), from the Stomach of a Cod. Presented by Dr. Patrick Neill.

# Tribe 2. PTERYGURITA.

Pterygures, M. Edw. Crust. ii. p. 199. Macroura, pt. Latr. Fam. Nat. p. 274. Macrouri, pt. Latr. Gen. Crust. et Ins. i. p. 44 (1806).

# FAM. I. PAGURIDÆ.

Paguridæ, Leach, Sam. Ent. U. Comp. p. 91. Pagurii, Latr. Fam. Nat. p. 276. Paguriens, M. Edw. Crust. ii. p. 209.

### 1. PAGURUS.

Pagurus, Fabr. Ent. Syst. Suppl. p. 388 (1798). Cancellus, Swammerdam. Astacus, sp. Degeer. Cancer, sp. Linn.

Hermit-Crabs (local name). Soldier Crabs (local name).

## 1. PAGURUS BERNHARDUS. Common Hermit-Crab.

Cancer Bernhardus, Linn. Syst. Nat. p. 1049, 57; Herbst, ii. p. 14, t. 22, f. 6.

Astacus Bernhardus, Penn. Brit. Zool. (edit. 1777) iv. t. xvii. f. 38, p. 18; Degecr, Mem. vii. p. 405, t. 23, f. 3-12.

Pagurus Bernhardus, Fabr. Ent. Syst. Suppl. p. 411; Ann. Sc. Nat. 2me ser. vi. p. 266; M. Edw. Crust. ii. p. 215; Cuv. R. A. (Croch.) t, 44, f. 2; Bell, Brit. Crust. p. 171.

Pagurus streblonyx, Leach, Mal. Pod. Brit. t. xxvi. f. 1-4.

Var., Owen, Beechey's Voyage, Zool. p. 81.

---- ? Reaum. Acad. Vienne, 1710, p. 464, t. 10.

a-l. Young. British Coast, in Shells.

m. Ilfracombe. From the collection of Col. Montagu.

n. Var. Plymouth, near the two Coves.

o-q. Devonshire. From the collections of Col. Montagu and Dr. Leach.

r. Young. Presented by Mr. Hield.

s—z. Cork. "Zoe of Pagurus Bernhardus." Presented by J. V. Thompson, Esq.

#### 2. PAGURUS PRIDEAUXII. Prideaux's Hermit-Crab.

Pagurus Prideaux, Leach, Mal. Pod. Brit. t. xxvi. f. 5, 6. Pagurus Prideauxii, M. Edw. Crust. ii. p. 216; Ann. Sc. Nat. 2me ser. vi. p. 268; Bell. Brit. Crust. p. 175; Lucas, Expl. Alger. p.

Pagurus solitarius, Risso, H. N. Eur. Mer. v. 40; Roux, Crust. Med. t. 36.

a-f. Plymouth Sound. Presented by C. Prideaux, Esq.

g—t. Plymouth Sound. From the collections of Col. Montagu and Dr. Leach.

m—n. Cornwall. In Halichondria suberica. Presented by W. P. Cocks, Esq.

#### 3. PAGURUS CUANENSIS.

Pagurus cuanensis, Thompson, Rep. Faun. Irel. (Report of the Brit. Assoc. 1843, p. 267); Bell, Brit. Crust. p. 178.
Pagurus spinimanus, Lucas, Expl. Alger. t. 3, f. 3?
Ireland, Portaferry, and Bangor Bay. (W. Thompson, Esq.)
Belfast Bay. (Dr. Drummond).

#### 4. PAGURUS ULIDIANUS.

Pagurus ulidiæ, W. Thompson, Rep. Faun. Irel. l. c. Pagurus ulidianus, Thompson; Bell, Brit. Crust. p. 180. Ireland, Portaferry. (W. Thompson, Esq.)

#### 5. PAGURUS HYNDMANNI.

Pagurus Hyndmanni, W. Thompson, Rep. Faun. Irel.; Bell, Brit. Crust. p. 182.

Ireland, Portaferry. (W. Thompson, Esq.) Belfast Bay. (Mr. Drummond).

#### 6. PAGURUS LÆVIS.

Pagurus lævis, Thompson, Rep. Faun. Irel.; Bell, Brit. Crust. p. 184.

Var.? Pagurus arenarius, Lucas, Expl. Alger. t. 3, f. 7?

Ireland, Portaferry. (W. Thompson, Esq.) Cornwall, Falmouth. (W. P. Cocks, Esq.)

#### 7. PAGURUS FORBESH.

Pagurus Forbesii, Bell, Brit. Crust. p. 186. Var.? Pagurus sculptimanus, Lucas, Expl. Sc. Alger. t. 3, f. 6? a. Cornwall (Falmouth). Presented by W. P. Cocks, Esq.

# FAM. II. PORCELLANIDÆ.

Porcellaniens, M. Edw. Crust. ii. p. 246. Galathinæ, pt. Latr. Fam. Nat. p. 278. Galateadæ, pt. Leach, Sam. Ent. U. Comp. p. 92.

#### 1. PORCELLANA.

Porcellana, Lam. Syst. An. sans Vert. p. 153 (platycheles), 1801. Cancer, sp. Penn.
Porcellana, sp. Leach, Dict. Sc. Nat. xviii. (platycheles).
Pisidia, sp. Leach, Dict. Sc. Nat. xviii. (longicornis).

### 1. PORCELLANA PLATYCHELES.

Cancer platycheles, Penn. Brit. Zool. (edit. 1777) iv. pl. vii. f. 12,

p. 5; Herbst. t. ii. f. 6.

Porcellana platycheles, Lam. An. sans Vert. v. p. 230; Leach, Dict. Sc. Nat. xviii. p. 55; Desm. Cons. p. 195, t. 34, f. 1; M. Edw. Hist. Crust. ii. p. 255; Bell, Brit. Crust. p. 190; Lucas, Expl. Alger. p. 34.

Cancelli spec. tert., Baster, Opusc. Subsec. ii. p. 46, t. 4, f. 3.

a-o. English Coast. From the collections of Col. Montagu and Dr. Leach.

p.—t. Cornwall (Looe). Presented by D. W. Mitchell, Esq. u—z. Cornwall. Presented by W. P. Cocks, Esq.

#### 2. Porcellana longicornis.

Cancer longicornis, Penn. Brit. Zool. iv. p. 3, pl. 1, f. 3; Herbst. ii. t. xlvii. f. 3.

Cancer longicornis, Linn. Syst. Nat. p. 1040, 10; Seb. Thes. iii. t. 17, f. 1—4.

Pisidia Linnæana, Leach, Dict. Sci. Nat. xviii. p. 54.

Porcellana Leachii, Gray, Zool. Misc. p. 15. Porcellana longicornis, M. Edw. Crust, ii. p. 257; Bell, Brit. Crust. p. 193; Lucas, Expl. Alger. p. 34.

a-o. British Coast. From the collections of Col. Montagu and Dr. Leach.

#### APPENDIX TO BRACHYURA AND ANOMOURA.

#### LARVA OR YOUNG OF SOME SPECIES OF CRAB.

Megalopa, Leach, Ed. Enc. vii. p. 431. Megalopidea, pt. Haan, Faun. Jap. p. 148.

- 1. Megalopa rhomboidalis, Leach, Ed. Enc.
- Cancer granarius, Herbst. P
- Cancer rhomboidalis, Montagu, Linn. Trans. vii p. 65, t. 6, f. 1. Megalopa Montagui, Leach, Mal. Pod. Brit. t. 16, f. 1-6; Desm. Cons. p. 201; M. Edw. Crust. ii. p. 262.
- a. S. Devon. From the collection of Col. Montagu. b, c. Torbay, Devon. Presented by J. Bulwer, Esq.
- 2. Megalopa armata, Leach, Mal. Pod. Brit. t. 16, f. 7-9; Desm. Cons. p. 201; M. Edw. Crust. ii. p. 262.
- a, b. Bigbury Bay (Devon). Presented by C. Prideaux, Esq.

# SUB-ORDER III. DECAPODA MACROURA.

Macroura, pt. Latr. Fam. Nat. p. 274.

Exochuata, pt. Fabr. Ent. Syst. p. 372 (1798).

Decapodes macroures, M. Edw. Crust. ii. p. 265.

Macrouri, pt. Latr. Gen. Crust. et Ins. i. p. 44.

Longicaudes ou Macroures, Dumeril, Zool. Anal. p. 183 (1806).

Pinnicaudes, Latr. Fam. Nat. p. 277, 1825.

### Tribe 1. ASTACITA.

Les Astaciens, Lam. Hist. Nat. An. sans Vert. v. p. 207. Macroures cuirasses, M. Edw. Crust. ii. p. 270.

### FAM. I. GALATHEIDÆ.

Galathinæ, pt. Latr. Fam. Nat. p. 278. Galathéides, M. Edw. Crust. ii. p. 270. Palinurini, II. Latr. Gen. Crust. et Ins. i. p. 48. Galateadæ, pt. Leach, Sam. Ent. U. Comp. p. 92.

### 1. GALATHEA.

Galatea, Fabr. Ent. Syst. Suppl. p. 391, 414 (1798). Galatea, Leach, Sam. Ent. U. Comp. p. 93 (1819). Cancer, sp. Linn.

1. GALATHEA SQUAMIFERA. Montagu's Plated Lobster.

Cancer (astacus) squamifer, Montagu, MSS.
Galathea squamifera, Leach, Ed. Enc. vii. p. 398; Dict. des Sc.
Nat. xviii. p. 51; Mal. Pod. Brit. t. xxviii. A.; M. Edw.
Crust. ii. p. 275; Couch, Cornish Fauna, p. 77; Thomps. Crust.
Ireland, l. c. p. 105; Bell, Brit. Crust. p. 197.

- Galathea Fabricii, Leach, Linn. Trans. xi. p. 340; Enc. Brit. Suppl. t. 21.
- a-g. South Coast of Devon. From the collection of Col. Montagu.

h. Sussex. Presented by J. E. Gray, Esq.

j-k. Cornwall (Falmouth). Young. Presented by W. P. Cocks, Esq.

#### 2. GALATHEA STRIGOSA. Common Plated Lobster.

Cancer strigosus, Linn. Syst. Nat. p. 1053; Herbst, ii. p. 50, t. xxvi.

Astacus strigosus, Penn. Brit. Zool. (edit. 1777) iv. pl. xiv. f. 26, p. 15.

- Galathea strigosa, Fabr. Ent. Syst. Suppl. p. 414; Latr. Gen. Crust. Ins. i. p. 49; Leach, Ed. Enc. vii. p. 398; Roux, Crust. Med. t. 16; Guerin, Icon. R. A. t. 17, f. 3; M. Edw. Crust. ii. p. 273; Cuv. R. A. (Croch.) t. 47, f. 1; Bell, Brit. Crust. p. 200; Lucas, Expl. Alger. p. 35.
- Galathea spinigera, Leach, Linn. Trans. xi. p. 340; Mal. Pod. Brit. xxviii. B.
- a—f. S. Coast of England. From the collections of Col. Montagu and Dr. Leach.

#### 3. GALATHEA NEXA. Embleton's Plated Lobster.

Galathea nexa, Embleton, in Proceed. Berwickshire Naturalists' Club. i. t. f.; Thompson, An. Nat. Hist. xx. p. 255; Bell, Brit. Crust. p. 204.

a—d. Falmouth, Cornwall. Presented by W. P. Cocks, Esq. Northumberland Coast. (Dr. Embleton).
Ireland, Coasts of Down and Antrim. (W. Thompson, Esq.)
Scotland, Loch Fyne. (R. M'Andrew, Esq.)
Shetland. (Prof. E. Forbes).

#### 2. MUNIDA.

Munida, Leach, Dict. Sc. Nat. xviii. p. 52; Desm. Cons. p. 191. Astacus, pt. Penn. Galathea, pt. Fabr.

# 1. MUNIDA BAMFFIA. Long-clawed Lobster.

Astacus Bamffius, Penn. Brit. Zool. (edit. 1777) iv. t. xiii. f. 25,

Cancer Bamfficus, Herbst, ii. t. xxvii. f. 3. (Copied from Pennant). Galathea rugosa, Fabr. Suppl. p. 415, 2; Latr. Hist. Nat. Crust. et Ins. vi. p. 198; Leach, Mal. Pod. Brit. t. xxix.; M. Edw. Crust. ii. p. 274.

Galathea longipeda, Lamarch, Syst. des Anim. sans Vert. p. 158

(1801).

Galathea Bamfia, Leach, Ed. Enc. vii. p. 398.

Munida rugosa, Leach, Dict. des Sci. Nat. xviii. p. 52.

Leo, Rondelet. Poiss. p. 390.

Munida Rondeletii, Bell, Brit. Crust. p. 208 (1847).

a-c. Plymouth Sound. Presented by C. Prideaux, Esq.

# FAM. II. SCYLLARIDÆ.

Scyllarides, Latr. Fam. Nat. p. 278 (1825). Scyllariens, M. Edw. Crust. ii. p. 279. Scyllaroidea, Haan, Faun. Jap. p. 151. Palinurini, I. Latr. Gen. Crust. et Ins. i. p. 47 (1806).

## 1. SCYLLARUS.

Scyllarus, Fabr. Syst. Ent. p. 413 (arctus), 1775. Cancer, sp. Linn.

### 1. SCYLLARUS ARCTUS. The Broad Lobster.

Seyllarus arctus, Fabr. Ent. Syst. Suppl. p. 399; Risso, Crust. Nice, p. 61; Roux, Crust. Med. t. 11; M. Edw. Crust. ii. p. 282; Cuv. R. A. (Croch.) t. 45, f. 1; Lucas, Expl. Alger. p. 35. Cancer arctus, Linn. Syst. Nat. p. 1053, 75; Faun. Succ. p.

2040; Lund, Kiob, Nat. Selsk, ii. p. 21.

Cancer (astacus) ursus minor, Herbst, ii. p. 83 t. 30, f. 2.

Hab. "Found by Dr. Borlase, on Careg Killas, in Mount's Bay, Cornwall," Penn. Brit. Zool. iv. p. 14.

### FAM. III. PALINURIDÆ.

Palinuridæ, Leach, Sam. Ent. U. Comp. p. 92. Palinuridea, Haan, Faun. Jap. p. 156. Langoustiens, M. Edw. Crust. ii. p. 289. Palinurini, I. Latr. Hist. Nat. Crust. i. p. 46. Palinurini, Latr. Fam. Nat. p. 278.

#### 1. PALINURUS.

Palinurus, Fabr. Ent. Syst. Suppl. p. 376—400 (1798). Astacus, sp. Olivi. Cancer, sp. Linn. Locusta, Belon. Kaράβος, Aristotle.

# 1. Palinurus homarus. Spiny Lobster.

Cancer Homarus, Linn. Syst. Nat. p. 1053, 74.

Cancer (Astacus) Homarus, Penn. Brit. Zool. (edit. 1777) iv. t. xi. f. 22, p. 13.

Palinurus quadricornis, Fabr. Suppl. p. 401; Latr. Hist. des Crust. vi. t. lii. f. 3, p. 193.

Palinurus locusta (Olivi), Guerin, Exp. Morée. p. 32.

Palinurus Homarus, Leach, Ed. Enc. vii. p. 397; Linn. Trans. xi. p. 339.

Palinurus vulgaris, Latr. Ann. du Mus. iii. p. 391; R. A. (Cuv.) iv. p. 8; Leach, Mal. Pod. Brit. t. xxx.; M. Edw. Crust. ii. p. 292; Cuv. R. A. (Croch). t. 46, f. 1; Bell, Brit. Crust. p. 213; Lucas, Expl. Alger. p. 36.

British Coast.

a, b. W. Coast of England. From the collections of Col. Montagu and Dr. Leach.

c—n. "Larva of Palinurus locusta." Cork. Presented by J. V. Thompson, Esq.

### FAM. IV. THALASSINADÆ.

Thalassiniens ou Macroures Fouisseurs, M. Edw. Crust. ii. p. 303. Astacini I., Latr. Gen. Crust. et Ins. i. p. 50. Astacinæ 1., Latr. Fam. Nat. p. 279. Astacidæ, pt. Leach, Sam. Ent. U. Comp. p. 94. Astacoidea, pt. Haan, Faun, Jap. p. 163. Thalassinadæ, Bell, Brit. Crust. p. 217.

#### 1. CALLIANASSA.

Callianassa, Leach, Ed. Enc. vii. p. 400. Cancer (Astacus), sp. Montagu.

#### Mud-burrower. 1. CALLIANASSA SUBTERRANEA.

Cancer (Astacus) subterraneus, Mont. Linn. Trans. ix. t. 3, f. 1, 2, p. 89.

Callianassa subterranea, Leach, Ed. Enc. vii. p. 400; Linn. Trans. xi. p. 341; Mal. Pod. Brit. t. xxxii.; Guerin, Icon. R. A. Crust. t. 19, f. 4; M. Edw. Crust. ii. p. 309; Cuv. R. A. (Croch.) t. 48, f. 3; Bell, Brit. Crust. p. 217; Lucas, Expl. Alger. p. 37.

Var. ? Callianassa laticauda, Otto. Act. Nat. Cur. xiv. t, 21, f. 3.

a-d. South Coast of Devon. From the collections of Col. Montagu and Dr. Leach.

c, f. Devon (Kingsbridge Estuary). From the collection of Dr. Leach.

#### 2. AXIUS.

Axius, Leach, Linn, Trans, xi. p. 343 (1814-1815). Axia, M. Edw. Crust, ii. p. 310; Haan, Faun. Jap. p. 163.

### 1. Axius Stirynchus.

Axius stirynchus, Leach, Linn. Trans. xi. p. 343; Mal. Pod. Brit. t. xxxiii.; Desm. Cons. Crust. t. xxxvi. f. 1, p. 207; Guer. Icon. Crust. t. 18, f. 5; Bell, Brit. Crust. p. 228.

Axia stirynchus, M. Edw. Crust. ii. p. 311; Cuv. R. A. (Croch.), t. 48, f. 2.

a. Devon (Sidmouth). From the collection of Dr. Leach.
b. Devon (Plymouth). From the collection of Col. Montagu.

#### 3. GEBIA.

Gebia, Leach, Mal. Pod. Brit. (letter-press to t. 31). Upogebia, Leach, Ed. Enc. vii. p. 402 (Hypogebia). Gebios, Risso, Hist. Nat. Eur. Mer. Thalassina, pt. Latr. R. A. iii. (1817).

#### 1. GEBIA STELLATA. Mud-borer.

Cancer (Astacus) stellatus, Mont. Linn. Trans. ix. t. iii. f. 5, p. 89.

Gebia stellata, Leach, Ed. Enc. xi. p. 342; Mal. Pod. Brit. t. xxxi. f. 1; Desm. Cons. t. 35, f. 2; M. Edw. Crust. ii. p. 313; Bell, Brit. Crust. p. 223.

a, b. Plymouth Sound. From the collection of Col. Montagu.
 c. Devon (Kingsbridge Estuary). Female. From the collection of Col. Montagu.

#### 2. GEBIA DELTUBA.

Gebia deltura, Leach, Mal. Pod. Brit. t. xxxi. f. 9, 10; M. Edw. Crust. ii. p. 314; Bell, Brit. Crust. p. 225; Thompson, An. Nat. Hist. xx. p. 239.

Gebia deltaura, Leach, Linn. Trans. xi. p. 342. Gebia stellata, var. aut Sex. alt.?

a—d. Plymouth Sound. From the collection of Col. Montagu.
e. Devon (Kingsbridge Estuary). Male. From the collection of Dr. Leach.

#### 4. CALOCARIS.

Calocaris, Bell, Brit. Crust. p. 231 (1847).

#### 1. CALOCARIS MACANDRE E.

Calocaris Macandrew, Bell, Brit. Crust. p. 233. a. Loch Fyne. Presented by R. M'Andrew, Esq.

### FAM. V. ASTACIDÆ.

Astacidæ, pt. Leach.
Astaciens, M. Edw. Crust. ii. p. 326.
Astacini, I. Latr. Gen. Crust. et Ins. i. p. 50.
Astacinæ, II. Latr. Fam. Nat. p. 279.
Astacoidea, pt. Haan, Faun. Jap. p. 163.

#### 1. POTAMOBIUS.

Potamobius, Leach, Sam. Ent. U. Comp. p. 95, 1819 (not Risso). Astacus, M. Edw. Crust. ii. p. 329 (1837). Astacus, pt. Fabr. Syst. Ent. p. 413 (1775); Ent. Syst. Suppl. p. 382, 406. Cancer, sp. Linn. Syst. Nat.

Craw-Fish or Cray-Fish (local name).

### 1. POTAMOBIUS ASTACUS. Cray-Fish.

Cancer fluviatilis, Rondel. Poiss, ii. p. 10.
Astacus fluviatilis, Gesner, Aldrov. Baster, Opusc. Sub. ii. t. 1.
Cancer astacus, Linn. Syst. Nat. p. 1051; Degeer, Penn. Brit. Zool. iv. p. 15, t. 15, f. 27.

Cancer nobilis, Schrank, Faun, Boic. iii. p. 246.

Astacus fluviatilis, Fabr. Ent. Syst. Suppl. p. 406; Latr. Hist. Nat. Crust. v. p. 235; Guerin, Icon. R. A. Crust. t. 19, f. 2 (blue variety); M. Edw. Crust. ii. p. 330; Haan, Faun. Jap. p. 164; Erichs. Arch. 1846, p. 90; Bell, Brit. Crust. p. 237.

Potamobius fluviatilis, Leach, Sam. Ent. U. Comp. p. 95 (not of Risso, H. N. Eur. Mer. v. p. 14, which is the Thelphusa flu-

viatilis).

Var. Cancer Torrentium, Schrank, Faun. Boic. iii. p. 247.
Astacus Torrentium, Koch, Panz. D. Ins. p. 186, 24.
Var. Astacus saxatilis, Koch, Panz. D. Ins. p. 140, 1.
Var. Astacus tristis, Koch. Panz. D. Ins. p. 140, 2.

a-c. England (near London).
d. Middlesex (New River).

e, f. Near London. Presented by Mr. John Doubleday.

#### 2. ASTACUS.

Astacus, Leach, Sam. Ent. U. Comp. p. 95 (1819). Homarus, M. Edw. Crust. ii. p. 333 (1837). Astacus, pt. Fabr. Ent. Syst. Suppl. p. 406. Cancer, pt. Linn. Syst. Nat.

#### 1. ASTACUS GAMMARUS. Common Lobster.

Astacus gammarus, Leach, Ed. Enc. vii. p. 398; Sam. Ent. U. Comp. p. 95.

Cancer gammarus, Linn. Faun. Suec. p. 2033; Syst. Nat. p. 1050; Herbst, ii. p. 42, t. xxv.; Penn. Brit. Zool. iv. p. 8, t. 10 f. 21.

Astacus marinus, Fabr. Ent. Syst. Suppl. p. 406; Latr. Hist. Nat. Crust. vi. p. 233.

Homarus vulgaris, M. Edw. Crust. ii. p. 334; Couch, Cornish Fauna; Kroyer, Mon. Hippolyte, t. 6, f. 133 (embryo); Bell, Brit. Crust. p. 242; Lucas, Expl. Alger. p. 38.

a-d. Britain. From the collections of Col. Montagu and Dr. Leach.

e-g. "Larvæ of Astacus marinus." Cork Harbour. Presented by J. V. Thompson, Esq.

#### 3. NEPHROPS.

Nephrops, Leach, Linn. Trans. xi. p. 344 (1814-1815). Astacus, pt. Fabr. Ent. Syst. Suppl. p. 406. Cancer, pt. Linn. Syst. Nat.

### 1. NEPHROPS NORVEGICUS. Norway Lobster.

Cancer norvegicus, Linn. Faun. Suec. p. 2039; Syst. Nat. i. p. 1053; O. Fabr. Faun. Grænl. p. 242; Herbet, ii. t. xxvi. f. 3; Ascanius, Icon. iv. p. 6, t. 39.

Astacus norvegicus, Fabr. Syst. Ent. p. 418; Penn. Brit. Zool.

(edit. 1777) iv. pl. xii. f. 24, p. 14.

Nephrops norvegicus, Leach. Ed. Enc. vii. p. 400; Linn. Trans. xi. p. 344; Mal. Pod. Brit. t. xxxvi.; Guerin, Icon. t. 19, f. 1; M. Edw. Hist. Nat. Crust. ii. p. 336; Bell, Brit. Crust. p. 251. Bogstav Hummer, Pontoppidan, Norg. Naturl. Hist. ii. p. 276, 279.

a-e. Firth of Forth. From the collection of Dr. Leach.

# Tribe 2. CARIDITA.

Carides, Latr. Fam. Nat. p. 280 (1825). Salicoques, M. Edw. Crust. ii. p. 338. Astacini, pt. Latr. Gen. Crust. et Ins. i. p. 50 (1806).

# FAM. VI. CRANGONIDÆ.

Crangoniens, M. Edw. Crust. ii. p. 339. Carides, I. 2 B., Latr. Fam. Nat. p. 281. Macroura, subdiv. ii. Leach, Linn. Trans. xi. p. 345. Palemonide, pt. Leach, Sam. Ent. U. Comp. p. 96:

### 1. CRANGON.

Crangon, Fabr. Ent. Syst. Suppl. p. 387, 409; M. Edw. Crust. ii. p. 340.
Crangon, pt. Leach, Mal. Pod.
Pontophilus, sp. Leach, Mal. Pod. Brit.
Egeon, sp. Risso, Crust. Nice.
Squilla, pt. Klein.
Crago, Lam. Syst. An. sans Vert. p. 159 (1801).
Astacus, pt. Herbst, ii.
Cancer, pt., Linn.

# 1. CRANGON VULGARIS. Common Shrimp.

Cancer crangon, Seba. iii. t. 21, f. 8.

Astacus crangon, Herbst, ii. p. 57, t. xxix. f. 3, 4; Penn. Brit. Zool. iv. p. 16, t. 15, f. 30; Muller, Zool. Dan. iii. t. 14, f. 4—10; Seba. Mus. iii. t. 21, f. 8.

Squilla cinerca, Klein.

Crangon vulgaris, Fabr. Suppl. p. 410; Latr. Hist. Nat. Crust. vi. p. 267, t. lv. f. 1, 2; Leach, Mal. Pod. Brit. t. xxxvii. B.; Guerin, Icon. R. A. (Crust.) t. 20, f. 4; M. Edw. Crust. ii. p. 341; Cuv. R. A. (Croch.) t. 51, f. 1; Bell, Brit. Crust. p. 256. Crago vulgaris, Lam. Syst. des Anim. sans Vert. p. 159. Le cardon, Fr.

a-c. Mouth of the Thames.

d. Bridgewater. Presented by W. Baker, Esq.

e. "Larva." Cork. Presented by J. V. Thompson, Esq.

#### 3. CRANGON FASCIATUS. Banded Shrimp.

Crangon fasciatus, Risso, Crust. Nice, t. iii. f. 5, p. 82; Hist. Eur. Merid. v. p. 64; M. Edw. Crust. ii. p. 342; Bell, Brit. Crust. p. 259; Lucas, Expl. Alyer. p. 38.

Devonshire, Salcombe Bay. (J. Alder, Esq.)

### 3. CRANGON SPINOSUS. Spiny Shrimp.

Crangon spinosus, Leach, Linn. Trans. xi. p. 346; Lam. Hist. Nat. des Anim. sans Vert. v. p. 202; Bell, Brit. Crust. p. 261. Pontophilus spinosus, Leach, Mal. Pod. Brit. t. xxxvii. A. Crangon cataphractus (part), Edw. Hist. des Crust. ii. p. 243; Cuv. R. A. (Croch). t. 51, f. 3. Egeon loricatus, Guerin, Exp. Morée. p. 33.

- a. Near the Eddystone. Presented by C. Prideaux, Esq.
   b. Off Falmouth. From the collection of Mr. Cranch.
- Shetland. (Prof. Forbes and R. M'Andrew, Esq.)

### 5. CRANGON SCULPTUS. Bell's Shrimp.

Crangon sculptus, Bell, Brit. Crust. p. 263. Weymouth. (J. S. Bowerbank, Esq.)

### 6. Crangon trispinosus. Hailstone's Shrimp.

Pontophilus trispinosus, Hailstone, Mag. of Nat. Hist. viii. p. 261, f. 25.

Crangon trispinosus, Bell, Brit. Crust. p. 265.

Hastings. (Mr. Hailstone).

## 7. CRANGON BISPINOSUS. Westwood's Shrimp.

Pontophilus bispinosus, Westwood; Hailstone, Mag. Nat. Hist viii. p. 11, 13, f. 30. Crangon bispinosus, Bell, Brit. Crust. p. 268. Hastings.

## FAM. VII. ALPHEIDÆ.

Alphéens, M. Edw. Crust. ii. p. 345. Carides, I. 2 A., Latr. Fam. Nat. p. 280. Macroura, subdiv. 3, pt. Leach, Linn. Trans. xi. p. 346. Palæmonidæ, pt. Leach, Sam. Ent. U. Comp. p. 96.

Athanasus, sp. Audouin, Descript. Crust. Egypt.

### 1. ALPHEUS.

Alpheus, Fabr. Ent. Syst. Suppl. p. 380, 404.
Palæmon, sp. Oliv. Enc. Meth. viii. p. 664; Wiegm. Arch. 1836, p. 149.
Asphalius, sp. Roux, Mem. Sal. p. 22.
Cryptophthalmus, sp. Raf. Precis. Som.

# 1. ALPHEUS RUBER. Edwards' Red Shrimp.

Alpheus ruber, M. Edw. Crust. ii. p. 351; Cuv. R. A. (Croch.) t. 3, f. 1; Bell, Brit. Crust. p. 271; Lucas, Expl. Alger. p. 38. Cryptophthalmus ruber, Raf. Prec. Som.

a. Falmouth (parts of from the Stomach of Haddock). Presented by W. P. Cocks, Esq.

### 2. NIKA.

Nika, Risso, Crust. Nice. Processa, Leach, Mal. Pod. Brit. t. 41.

### 1. NIKA EDULIS. Risso's Shrimp.

Nika edulis, Risso, Crust. Nice, p. 85, t. iii. f. 3; Hist. Eur. Mer. v. p. 72; Roux, Crust. Medit. t. xlv.; Lam. Hist. Anim. sans Vert. v. p. 203; Desm. Cons. p. 230; M. Edw. Crust. ii. p. 364: Cuv. R. A. (Croch.) t. 52, f. 1; Bell, Brit. Crust. p. 275.

Processa canaliculata, Leach, Mal. Pod. Brit. t. xli. Processa edulis, Latr. Cuv. R. A. (2 edit.) iv. p. 95. Nika canaliculata, Desm. Cons. t. xxxix. f. 4.

a. Devon (Torcross). From the collection of Col. Montagu.

b. Bognor. Presented by Prof. Bell.

South of Ireland. W. Thompson, Esq.

### 2. NIKA COUCHII. Couch's Shrimp.

Nika Couchii, Bell, Brit. Crust. p. 278.

a. Cornwall. Presented by J. Couch, Esq., F.L.S.

#### 3. ATHANAS.

Athanas, Leach, Ed. Enc. vii. p. 432, app.; Linn. Trans. xi. p. 349.

Palæmon, sp. Leach, Ed. Enc. vii. p. 401. Cancer (Astacus), Montagu, MSS.

### 1. ATHANAS NITESCENS. Montagu's Shrimp.

Cancer (Astacus) nitescens, Montagu, MSS. Palæmon nitescens, Leach, Ed. Enc. vii. p. 401.

Athanas nitescens, Leach, Ed. Enc. vii. p. 432; Linn. Trans. xi. p. 349; Enc. Brit. Suppl. i. p. 401; Mal. Pod. Brit. t. xliv.; Desm. Cons. p. 240, t. 39, f. 5; Guerin, Icon. R. A. t. 22, f. 2; M. Edw. Crust. ii. p. 366; Bell, Brit. Crust. p. 281; Lucas, Expl. Alger. p. 41.

a—c. Devon and Cornwall. From the collection of Col. Montagu. Clare, Ireland. (Prof. Forbes and W. Thompson, Esq.)

### FAM. VIII. PALÆMONIDÆ.

Palémoniens, M. Edw. Crust. ii. p. 367. Macroura, subdiv. 3 & 4, pt. Leach, Linn. Trans. xi. p. 346, 348. Astacini, pt. Latr. Gen. Crust. et Ins. i. p. 50. Carides, I. 2 A., Latr. Fam. Nat. p. 281. Palæmonidæ, pt. Leach, Sam. Ent. U. Comp. p. 96.

#### 1. HIPPOLYTE.

Hyppolyte, Leach, Linn. Trans. xi. p. 346.
Hippolyte, Leach. l. c. p. 347; Mal. Pod. Brit. t. 38, 39.
Hippolytus, Guerin, Exp. Mor. p. 41.
Cancer, sp. O. Fabr.
Palæmon, pt. Olivi, Enc. viii.
Cancer (Astacus), pt. Montagu, Linn. Trans. ix. p. 91.
Alpheus, Latr.
Caridina, sp. Joly, Ann. Sc. Nat. 1843.

## 1. HIPPOLYTE SPINUS. Sowerby's Shrimp.

Cancer spinus, Sowerby, Brit. Misc. t. xxi.
Alphæus spinus, Leach, Ed. Enc. vii. p. 431; Linn. Trans. xi. p.
347; Enc. Brit. Suppl. i. p. 421.
Hippolyte Sowerbæi, Leach. Mal. Pod. Brit. t. xxxix.; Desm. Cons.

p. 223, t. xxxix. f. 1.

Hippolyte Sowerbyi, M. Edw. Crust. ii. p. 380. Hippolyte Sowerbei, J. C. Ross, App. Ross's 2nd Voy. p. 83, t. B., f. 2; Kroyer, Mon. p. 96, t. ii. f. 45, 54. Hippolyte spinus, Bell, Brit. Crust. p. 284.

a. Firth of Forth (Newhaven). Presented by Dr. Patrick Neill. Isle of Man. (R. M'Andrew, Esq.)

## 2. HIPPOLYTE VARIANS. Leach's Shrimp.

Hippolyte varians, Leach, Ed. Enc. viii. p. 432; Linn. Trans. xi. p. 347; Enc. Brit. Suppl. i. p. 421; Mal. Pod. Brit. t. xxxviii. f. 6—16; M. Edw. Crust. ii. p. 371; Bell, Brit. Crust. p. 286.

a-d. Coasts of Devon and Corowall. From the collection of Col. Montagu.

Ireland (Down, Connemara, Dublin).

# 3. HIPPOLYTE CRANCHII. Cranch's Shrimp.

Hippolyte Cranchii, Leach, Mal. Pod. Brit. t. xxxviii, f. 17—21; M. Edw. Crust. ii. p. 376; Couch, Cornish Fauna; Bell, Brit. Crust. p. 288; Lucas, Expl. Alger. p. 44.

a, b. Kingsbridge Estuary. From the collection of Mr. John Cranch.

- 4. HIPPOLYTE PRIDEAUXIANA. Prideaux's Shrimp.
- Hippolyte Prideauxiana, Leach, Mal. Pod. Brit. t. 38, f. 1; Desm. Cons. p. 221; M. Edw. Crust. ii. p. 372.
- a. Devon (Bantham). Presented by C. Prideaux, Esq.
  - 5. HIPPOLYTE MOORII. Moor's Shrimp.

Hippolyte Moorii, Leach, Mal. Pod. Brit. t. 38, f. 2; Desm. Cons. p. 221; M. Edw. Crust. ii. p. 372.

a. Plymouth Sound. Presented by C. Prideaux, Esq.

#### 2. DIENECIA.

Dienecia, Westw. Mag. Nat. Hist. viii. An genus distinctum?

#### 1. DIENECIA RUBRA.

Dienecia rubra, Westw. Mag. Nat. Hist. viii. p. 552. ? Hippolyte ?rubra, Westw. Mag. Nat. Hist. viii. p. 272, f. 31. Hastings.

#### 3. PANDALUS.

Pandalus, Leach, Mal. Pod. Brit. t. 40; Ed. Enc. vii. p. 432. Astacus, pt. Fabr. Pontophilus, sp. Risso, Eur. Mer. v.

1. PANDALUS MONTAGUI. Ringed-horned Shrimp.

Pandalus annulicornis, Leach, Mal. Pod. Brit. t. 40; Lam. Hist. An. sans Vert. v. p. 203; Desm. Cons. p. 220, t. 38, f. 2; M. Edw. Crust. ii. p. 384; Kroyer, Gaim. Voy. Scand. Lap. t. 6, f. 3, a-e.

Pandalus Montagui, Leach, Ed. Enc. vii. p. 432 (Crustaceology, app.).

Astacus maculatus, Montagu, MSS.; Leach, l. c. p. 432.

- a, b. Norfolk (Yarmouth). From the collection of Dr. Leach.
- c. Devon. From the collection of Col. Montagu.
- d. Scotland, Zetland. Presented by Dr. Fleming.

#### 4. PALÆMON.

Palemon, Fabr. Ent. Syst. Suppl. p. 378, 402, Squilla, pt. Baster.
Cancer, pt. Linn.
Astacus, pt. Penn. Brit. Zool.
Melicerta, pt. Risso, Crust. Nice.

### 1. PALEMON SERRATUS. Common Prawn.

Palæmon serratus, Fabr. Ent. Syst. Suppl. p. 604; Leach, Mal. Pod. Brit. t. 43, f. 1; Desm. Cons. t. 40, f. 1; Guerin, Exp. Morée, p. 43; M. Edw. Crust. ii. p. 389; Cuv. R. A. (Croch.) t. 54, f. 1; Lucas, Expl. Alger. p. 44.

Cancer (Astacus) serratus, Penn. Brit. Zool. iv. p. 15, t. 16, f. 28.

British and Irish Coasts.

a-o. England.

p. Berwick. Presented by Dr. George Johnston. q. Cornwall. Presented by W. P. Cocks, Esq.

## 2. PALÆMON SQUILLA. White Shrimp.

Palæmon squilla, Fabr. Ent. Syst. Suppl. p. 403; Leach, Mal. Pod. Brit. t. 43, f. 11; Desm. Cons. p. 235; Guerin, Icon. t. 22, f. 1; Exp. Morée. 43; M. Edw. Crust. ii. p. 390; Lucas, Expl. Alger. p. 44.

Cancer squilla, Linn. Faun. Suec. p. 2037; Syst. Nat. i. p. 1051;

O. Fabr. Faun. Grænt. p. 237.

Cancer (Astacus) squilla, Penn. Brit. Zool. iv. p. 16, pl. 16, f. 28.

"White Shrimp." London market. La chevrette, Fr.

a-g. S. W. Coast of Devon. From the collection of Col. Montagu.

h-n. Mouth of the Thames. From the collection of Dr. Leach. o. Sussex (Little Hampton).

# 3. PALEMON VARIANS. Variable Shrimp.

Palæmon varians, Leach, Mal. Pod. Brit. t. 43, f. 14; Linn. Trans. xi, p. 349; Desm. Cons. p. 135; M. Edw. Crust. ii. p. 391.

a. Devon. From the collection of Dr. Leach.
b. Norfolk. From the collection of Dr. Leach.

c. Glamorgan. From the collection of Dr. Leach.

### FAM. IX. PENÆIDÆ.

Penéens, M. Edw. Crust. ii. p. 403. Carides, I. & II., Latr. Fam. Nat. p. 280, 281. Palæmonidæ, pt. Leach, Sam. Ent. U. Comp. p. 96.

#### 1. PENÆUS.

Penæus, pt. Fabr. Ent. Syst. Suppl. p. 385, 408. Palæmon, sp. Olivi, Enc. viii. Cancer, sp. Linn. Squilla, Rond.

1. Penæus trisulcatus. Davies' Grooved Shrimp.

Penæus trisulcatus, Leach, Linn. Trans. xi. p. 347; Mal. Pod. Brit. t. 42; Desm. Cons. p. 225.
Penæus caramote, var.? M. Edw. Crust. ii. p. 413.
Shore of Anglesea. (Rev. H. Davies).
Coast of Wales.

#### 2. PASIPHÆA.

Pasiphæa, Savigny, Mem. p. 50 (note). Alphæus, Risso, Crust. Nice.

2. Pasiphæa Savignyi. Savigny's Shrimp.

Pasiphæa Savignyi, M. Edw. Crust. ii. p. 426. Pasiphæa Savigniana, Leach, MSS.

- a. Bridgewater. Presented by W. Baker, Esq.
- b. Ireland. Presented by the Rev. J. Bulwer.

## 3. Pasiphæa sivado. Sword Shrimp.

Pasiphæa sivado, M. Edw. Crust. ii. p. 426. Alphæus sivado, Risso, Crust. Nice. p. 93, t. 3, f. 4. British Coast?

# ORDER II. STOMAPODA.

Stomapoda, Latr. Fam. Nat. p. 282. Stomapoda, pt. Haan, Faun. Jap. Exp. p. 15 (1833). Stomapodes, M. Edw. Crust. ii. p. 441. Branchiopodes, Cuv. Leç. An. Comp. Branchiogastres, pt. Latr. Capités ou Arthrocephales, pt. Dumeril, Zool. Anal. p. 185 (1806).

# Tribe 1. SCHIZOPODITA.

Caridioides, M. Edw. Crust. ii. p. 449. Schizopoda, pt. Latr. Fam. Nat. p. 282 (1825). Fissipes, Lam. Hist. Anim. sans Vert. v. p. 197.

### FAM. I. MYSIDIDÆ.

Opossum Shrimps, Thompson.
Mysiens, M. Edw. Crust. ii. p. 451.
Macroura (Div. VIII), Leach, Linn. Trans. xi. p. 349.
Squillares, pt. Latr. Gen. Crust. et Ins. i. p. 55.
Palæmonidæ, stirps 5, Leach, Sam. Ent. U. Comp. p. 99.
Nebalidea, pt. Haan, Faun. Jap. Exp. p. 15 (1833).

### 1. MYSIS.

Mysis, Latr. Hist. Nat. Crust. vi. p. 282 (1803); Gen. Crust. et Ins. i. p. 56, 1806 (Saltatorius). Praunus, Leach, Ed. Enc. vii. p. 401. Cancer, Müller, Zool. Dan. ii. Cancer (Astacus) pt. Montagu, Linn. Trans. ix.

# 1. Mysis Chamæleon. Thompson's Opossum Shrimp.

Mysis chamæleon, Thomp. (J. V.) Zool. Res. p. 2, pl. 2, f. 1—10; Thomp. (W.) Ann. Nat. Hist. xx, p. 240.

British Seas.

2. Mysis spinulosus. Leach's Opposum Shrimp.

Mysis spinulosus, Leach, Linn. Trans. xi. p. 350; Desm. Cons. p. 242; M. Edw. Crust. ii. p. 457. Praunus flexuosus, Leach, Ed. Enc. vii. p. 401. Mysis spinulosa, Leach, Sam. Ent. U. Comp. p. 99.

Mysis Leachi, Thomp. Zool. Res. p. 27.

a-e. Firth of Forth. From the collection of Dr. Leach. f.—q. Devon (Salcombe).

3. Mysis vulgaris. Common Opossum Shrimp.

Mysis vulgaris, Thomp. Zool. Res. p. 30, pl. 1; Thomp. (W.) Ann. Nat. Hist. xx. p. 241.

British Seas.

4. Mysis integer. Arran Opossum Shrimp.

Mysis integer, Leach, Linn. Trans. xi. p. 350; Desm. Cons. p. 242; M. Edw. Crust. ii. p. 460.

Praunus integer, Leach, Ed. Enc. vii. p. 401. Mysis Scoticus, Thomp. Zool, Res. p. 30.

a-d. Arran (Loch Ranza). From the collection of Dr. Leach.

#### 2. MACROMYSIS.

Macromysis, White, List of Crust. in Brit. Mus. (1847) p. 81. Themisto, Goodsir, Edin. New Phil. Journ. xxxiii. (not Guerin).

1. Macromysis longispinosus. Opossum Shrimp.

Themisto longispinosus, Goodsir, Edin. New Phil. Journ. xxxiii. p. 176, t. 2, f. 4.

Macromysis longispinosa, White, List of Crust. in Brit. Mus. (1847) p. 81.

- a, b. Firth of Forth. Presented by Henry Goodsir, Esq., R.N.
- 2. Macromysis brevispinosus. Short-spined Shrimp. Themisto brevispinosa, Goodsir, Edin. New Phil. Journ. xxxiii. p. 177, pl. 2, f. 9.

Macromysis brevispinosa, Thomp. (W). Ann. Nat. Hist. xx. p. 240.

Firth of Forth.

#### 3. CYNTHILIA.

Cynthia, Thomp. Zool. Res. i. p. 52, (not Fabr.)

1. CYNTHILIA FLEMINGII. Fleming's Cyuthilia.

Cynthia Flemingii, Goodsir, Edin. New Phil. Journ. xxxiii. p. 175, t. 2, f. 1.

a. Firth of Forth. Presented by Henry Goodsir, Esq., R.N.

### Tribe 2. UNIPELTITA.

Unipeltata, Latr. Fam. Nat. p. 283. Unicuirassés, M. Edw. Crust. ii. p. 489. Stomapoda, Haan, Faun. Jap. Exp. p. 15 (1833).

### FAM. I. SQUILLIDÆ.

Squilliens, M. Edw. Crust. ii. p. 509. Squillares, pt. Latr. Gen. Crust. et Ins. i. p. 55.

### 1. SQUILLA.

Squilla, Fabr. Ent. Syst. Suppl. p. 393, 415. Cancer, Linn. p. Mantis Crabs.

# 1. Squilla Desmarestii. The Mantis Crab.

Squilla Desmarestii, Risso, Crust. Nice, p. 114, t. 2, f. 8; Roux,
 Crust. Med. t. 30; Yarrell, Mag. Nat. Hist. vi. p. 230, f. 23;
 Lukis, Mag. Nat. Hist. viii. p. 462, f. 39; M. Edw. Crust. ii.
 p. 523, t. 1, f. 1.

British Coast
a. Off Brighton. From Dr. Mantell's collection.
Cornwall (Mr. Couch).

#### LEGION II. EDRIOPHTHALMA.

Edriophthalma, Leach, Linn. Trans. xi. p. 307 (1814—1815). Crustacés Sessiliocles, Lam. Syst. An. sans Vert. p. 161 (1801).

## ORDER III. AMPHIPODA.

Amphipoda, Latr. Fam. Nat. p. 287.
Gasteruri, pt. Leach, Ed. Enc. vii. p. 432.
Tetradecapoda, pt. Haan, Faun. Jap. Exp. p. 16 (1833).
Amphipodes, M. Edw. Crust. iii. p. 5.
Gammaridæ, Leach, Sam. Ent. U. Comp. p. 101 (1819).
Capités ou Arthrocephales, pt. Dumeril, Zool. Anal. p. 185 (1806).

### Tribe 1. GAMMARITA.

Gammerides, Leach, Ed. Enc. vii. p. 432. Crevettines, M. Edw. Crust. iii. p. 8. Gammarinæ, Latr. Gen. Crust. et Ins. i. p. 56. Gammaracea, Dana, Amer. Journ. viii. (2nd ser.).

## FAM. I. ORCHESTIDÆ.

Crevettines sauteuses, pt. M. Edw. Crust. ii. p. 10. Orchestidæ, Leach, Ed. Enc. vii. p. 432; Dana, Amer. Journ. viii. (2nd ser.).

#### 1. TALITRUS.

Talitrus, Bosc, Hist. Crust. ii. (1802); Latr. Hist. Nat. Crust. vi p. 294.
Squilla, Klein.
Oniscus, pt. Pallas, Spic. Zool.
Gammarus, pt. Fabr. Syst. Ent. p. 418 (1775).

vanilla Linner - Femings Lynid van Semina - eller Lin Ser Fill Com. in Sin Sen Steeniel v Henry Floter, Esp.

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Commence L. East, Sept. Lot 444.

Sept. Sept. Lot 444.

Sept. Sept. Sept. Lot 444.

Sept. Sept. Sept. Lot 444.

FALL STELLIDE

Augiliana I San Francis i i 1879 Ann arts is and fran Francis i p. 55.

LUITAR :

ster. Jan. 3.

# LEGION II. EDRIOPHTHALMA.

riophthalma, Leach, Linn. Trans. xi. p. 307 (1814—1815). astacés Sessiliocles, Lam. Syst. An. sans Vert. p. 161 (1801).

# ORDER III. AMPHIPODA.

aphipoda, Latr. Fam. Nat. p. 287.
steruri, pt. Leach, Ed. Enc. vii. p. 432.
tradecapoda, pt. Haan, Faun. Jap. Exp. p. 16 (1833).
aphipodes, M. Edw. Crust. iii. p. 5.
mmaridæ, Leach, Sam. Ent. U. Comp. p. 101 (1819).
pités ou Arthrocephales, pt. Dumeril, Zool. Anal. p. 185 (1806).

# Tribe 1. GAMMARITA.

mmerides, Leach, Ed. Enc. vii. p. 432. vettines, M. Edw. Crust, iii. p. 8. mmariow, Latr. Gen. Crust. et Ins. i. p. 56. mmaracea, Dana, Amer. Journ. viii. (2nd ser.).

## FAM. I. ORCHESTID E.

epitities sautouses, pt. M. Edw. Crestille, Leach, Ed. Enc. vii. p.

I. TAL.F

11. (18

er. Journ. viii.

t. Nat. Crust. vi

## 1. TALITRUS LOCUSTA. The Common Sand-hopper.

Talitrus locusta, Latr. Hist. Nat. Crust. vi. p. 229; Leach, Linn. Trans. xi. p. 306; Desm. Cans. t. 45, f. 2; Leach, Ed. Enc, vii. p. 432; Linn. Trans. xi. 356, J. 2.

Oniscus locusta, Pallas, Spic. Zool. ix. t. 4, f. 7. (Cop. Herbst. t.

36, f. 1).

Cancer locusta, Linn. Syst. Nat. ii. p. 1055. Squilla saltatrix, Klein, Crust. p. 68, f. D F.

Gammarus saltator, Mont. Linn. Trans. ix. t. 4, f. 3.

Talitrus saltator, M. Edw. Ann. Sc. Nat. xx. p. 364; Crust. iii. p. 13; Cuv. R. A. (Croch.) t. 69, f. 2; Guerin, Exp. Morée. p. 44.

Talitrus littoralis, Leach, Ed. Enc. vii. p. 402. 9.

a-o. British Coast.

### 2. ORCHESTIA.

Orchestia, Leach, Ed. Enc. vii. p. 402. Scambella, pt. Leach. Oniscus, pt. Pallas, Spic. Zool. Gammarus, Montagu. Talitrus, pt. Say. Pulex, Baster, Op. Subs. ii. p. 31.

# 1. ORCHESTIA LITTOREA. The Common Shore-Jumper.

Orchestia littorea, Leach, Ed. Enc. vii. p. 402; Linn. Trans. xi. p. 356; Desm. Cons. t. 45, f. 3; M. Edw. Crust. iii. p. 16; Cuv. R. A. (Croch.) t. 59, f. 3.

Cancer (Gammarus) littoreus, Mont. Linn. Trans. ix. 1. 4, f. 4.

Pulex marinus, Buster, Opusc. Subs. t. 3, f. 7, 8. Cancer gammarellus, Herbst, ii. t. 36, f. 2, 3.

a-s. British Coast.

# 2. ORCHESTIA DESHAVESII. Deshayes' Shore Jumper.

Orchestia Deshayesii, Audouin, Exp. Pl. Egypte, t. 11, f. 8; M. Edw. Crust. iii. p. 18.

Scamballa Kuhliana, Leach, MSS.

a. British Coast. From the collection of Dr. Leach.

### FAM. II. GAMMARIDÆ.

Gammaridæ, Dana, Amer. Journ. viii. (2nd ser.) Crevettines sauteuses, pt. M. Edw. Crust. ii. p. 10. Gammaridæ, pt. Leach, Ed. Enc. vii. p. 432. Dexameridæ, pt. (Dexaminidæ) Leach, Ed. Enc. vii. p. 432.

#### 1. DEXAMINE.

Dexamine, Leach, Ed. Enc. vii. p. 432. Gammarus, pt. Montagu. Acanthonotus, pt.? M. Edw. Crust. iii. p. 25.

#### 1. DEXAMINE SPINOSA. Spined Sea-Screw.

Dexamine spinosa, Leach, Enc. Brit. vii. p. 433; Zool. Misc. ii. p. 23; Linn. Trans. xi. p. 358; Desm. Cons. p. 45, f. 6. Cancer (Gammarus) spinosus, Mont. Linn. Trans. xi. p. 3, t. 2, f. 1. (fig. imp.)
Acanthonotus? sp. M. Edw. Crust. iii. p. 25.
South Coast of England.
a—f. Torcross. From the collection of Col. Montagu.

### 2. DEXAMINE? CARINO-SPINOSA.

Cancer carino-spinosus, Turton; Mont. Linn. Trans. xi. p 4? a. Isle of Wight? Old collection.

#### 2. OPIS.

Opis, Kroyer, Nat. Tidsk. iv. p. 149 (1842).

g. London Market (on an Oyster).

1. Opis typica. Kroyer's Sea-Screw.

Opis typica, Kroyer, Nat. Tidsk. iv.; Voy. Scand. t. 17, f. 1. a. Ireland (Strangford Loch). Presented by W. Thompson, Esq.

#### 3. ANONYX.

Anonyx, Kroyer, Nat. Tidsk. ii. p. 256.

1. ANONYX ALBUS.

Anonyx albus.

a, b. British Coast.

2. ANONYX, sp.

Anonyx, sp. Thomp. Ann. Nat. Hist. xx. p. 243. Ireland.

#### 4. AMPHITHOE.

Gammarus, pt. Montagu. Ampithoë (rubricata), Leach, Ed. Enc. vii. p. 432. Pherusa, pt. Leach, Ed. Enc. vii. p. 432. Melita, pt. Leach. Amphitoë, M. Edw. Crust. iii. p. 28.

1. AMPHITHOE RUBBICATA. Montagu's Coast-Screw.

Amphithoë rubricata, Leach, Linn. Trans. xi. p. 360; Desm. Cons. t. 45, f. 9; M. Edw. Ann. Sc. Nat. xx. p. 377; Crust. iii. p. 33; Thomp. (W.) Ann. Nat. Hist. xx. p. 242.
Gammarus rubricatus, Mont. Linn. Trans. ix. t. 5, f. 1.

a-g. S. Coast of Devon. From the collection of Col. Montagu.
 b. Eggs of Ampithoë. From the collection of Col. Montagu.

2. AMPHITHOE PUNCTATA. Johnston's Coast-Screw.

Gammarus punctatus, Johnston, Zool. Journ. iii. p. 177; Thomp. (W.) Ann. Nat. Hist. xx. p. 243.

a-d. Coast of Berwickshire. Presented by Dr. George Johnston.

## 3. AMPHITHOE DUBIA.

Gammarus dubius, Johnston, Zool. Journ. iii. p. 178. Coast of Berwickshire.

4. AMPHITHOE PUCICOLA. Landsborough's Coast-Screw.

Amphithoë fucicola, M. Edw. Ann. Sc. Nat. xx. p. 377; Crust. iii. p. 32; Thomp. (W.) Ann. Nat. Hist. xx. p. 242.

- Pherusa fucicola, Leach, Ed. Enc. Suppl. i. p. 426, vii. p. 432; Linn. Trans. xi. p. 360.
- a—c. Rocky Shores of Devon (under stones, at low-tide under Fuci). From the collection of Col. Montagu.
  - 5. Amphithoe obtusata. Leach's Coast-Screw.

Amphithoë obtusata, M. Edw. Ann. Sc. Nat. xx. p. 377; Gammarus obtusatus, Mont. Linn. Trans. xi. t. 2, f. 7.
Melita obtusata, Leach, MSS.

a. Devon (Salcombe Bay). From the collection of Col. Montagu.

#### 5. ACANTHONOTUS.

Acanthonotus, Owen, Ross's Second Voyage, Appendix, p. xc. (1835). Oniscus, pt. O. Fabr. Faun. Grænl. Amphithoë, pt. Kroyer. Vertumnus, Leach, MSS.; White (1847).

1. Acanthonotus (Vertumnus) Testudo. Cranch's Sea-Screw.

Jun. Oniscus Testudo, Mont. Linn. Trans. ix. p. 102, t. 5, f. 5

(fig. pessima); Leach, Ed. Enc. vii. p. 405. Vertumnus Cranchii, Leach, MSS.; White, List of Crust. in

Brit. Mus. p. 89 (1847). Acanthonotus (Vertumnus) Testudo, White, Proc. Zool. Soc. Lond.

a-d. Falmouth. Collected by Mr. John Cranch.

e. Cornwall. Presented by W. P. Cocks, Esq.

#### 6. GAMMARUS.

Gammarus, Latr. Gen. Crust. et Ins. i. p. 58 (pulex); Leach, Ed. Enc. vii. p. 402.

Mæra, pt. Leach, Ed. Enc. vii. p. 403.

Gammarus, pt. Fabr. Syst. Ent. p. 418 (1775); Ent. Syst. ii. p. 514. Oniscus, pt. Pallas, Spic. Zool. Squilla, pt. Degeer, Mem. vii.

1850, t.

#### 1. Gammarus locusta. The Common Coast-Screw.

Gammarus locusta, Fabr. Ent. Syst. ii. p. 516; Leach, Ed. Enc. xi. p. 359; Desm. Cons. p. 267; Kroyer, Grönl. Amfip.; Rathke, Faun. Crim. t. 5, f. 11—14; M. Edw. Crust. ii. p. 44.

Cancer (Astacus) locusta, Penn. Brit. Zool. iv. p. 17. Cancer (Gammarus) locusta, Mont. Linn. Trans. xi. p. 359. O. pulex, O. Fabr. Faun. Gr. p. 254?

a-h. British Coast (in pools left by the tide).

#### 2. GAMMARUS FLUVIATILIS. The Freshwater Screw.

Gammarus fluviatilis, M. Edw. Crust. iii. p. 45.
Astacus fluviatilis, Ræsel. Ins. Bel. iii. t. 52; Geoff. Hist. Ins. t. 21,
f. 6.

Squilla pulex, Degeer, Mem. viii. t. 33.

Gammarus Rœselii, Gervais, Ann. Sc. Nat. 2nd ser. iv. p. 128. Gammarus aquaticus, Leach, Enc. Brit. Suppl. i. p. 425.

a-g. Duddingston, near Edinburgh. From the collection of Dr. Leach.

### 3. GAMMARUS PULEX. The Flea-Screw.

Gammarus pulex, Fabr. Ent. Syst. ii. p. 516; Latr. Hist. Nat. Crust. vi. p. 316; Mont. Linn. Trans. ix. t. 4, f. 2; Desm. Cons. p. 267, t. 45, f. 8; M. Edw. Crust. iii. p. 48.

Cancer pulex, pt. Linn. Syst. Nat. i. p. 1055; Geoff. Ins. Par. ii.

p. 667, t. 21, f. 6.

Astacus pulex, Penn. Brit. Zool. iv. p. 17.

a-c. Ireland (Loch Neagh). Presented by W. Thompson, Esq.

### ? 4. GAMMARUS SUBTERRANEUS.

Gammarus subterraneus, Leach, Ed. Enc. vii. p. 403. Gammarus pulex, var. jau.?

Well, St. Bartholomew's Hospital, London.

### 5. GAMMARUS MARINUS. Leach's Coast-Screw.

Gammarus marinus, Leach, Linn. Trans. xi. p. 359; Desm. Cons. ii. p. 267; M. Edw. Ann. Sc. Nat. xx. p. 367; Crust. iii. p. 46; Thomp. (W.) Ann. Nat. Hist. xx. p. 242.

a-e. S. Coast of Devon. From the collection of Col. Montagu.

# 6. GAMMARUS CARINATUS. The Keeled Coast-Screw.

Gammarus carinatus, Johnston, Zool. Journ. iv. p. 52. Berwickshire Coast. Dr. George Johnston. 7. Gammarus camptolops. The Bent-eyed Coast-Screw.

Gammarus campylops, Leach, Linn. Trans. xi. p. 360; Desm. Cons. p. 267; M. Edw. Ann. Sc. Nat. xx. p. 267; Crust. iii. p. 48; Thomp. Ann. Nat. Hist. xx. p. 242. Gammarus camylops, Leach, Ed. Enc. vii. p. 403.

Gammarus camptolops, Leach, Sam. Ent. U. Comp. p. 104.

- a, b. Isle of Arran (near Loch Ranza). From the collection of Dr. Leach.
  - 8. Gammarus maculatus. The Spotted Coast-Screw.

Gammarus maculatus, Johnston, Zool. Journ. iii. p. 176. Berwickshire Coast. Dr. George Johnston.

9. Gammarus Longimanus. The Long-handed Coast-Screw.

Gammarus longimanus, Thomp. Ann. Nat. Hist. xx. p. 242. Mæra longimana, Leach, MSS.

- a. British Coast. From the collection of Dr. Leach.
  - 10. GAMMARUS GROSSIMANUS. The Thick-handed Coast-Screw.

Gammarus grossimanus, Mont. Linn. Trans. ix. t. 4, f. 5. Mæra grossimana, Leach, Ed. Enc. vii. p. 403; Linn. Trans. xi. p. 359; Desm. Cons. p. 265.

Rocky shores, in pools left by the receding tide. a-f. Devon. From the collection of Col. Montagu.

#### 5. LEUCOTHOE.

Leucothoe, Leach, Ed. Enc. vii. p. 403 (articulosa). Lycesta, Savigny, Mem. An. sans Vert.

1. LEUCOTHOE ARTICULOSA. The Jointed Coast-Screw.

Leucothoé articulosa, Leach, Ed. Enc. vii. p. 403; Linn. Trans. xi. p. 358; Desm. Cons. p. 263, t. 45, f. 5. Cancer (Gammarus) articulosus, Mont. Linn. Trans. vii. p. 70, t. 6, f. 6.

a-d. S. Coast of Devon. From the collection of Col. Montagu.

## FAM. III. PODOCERIDÆ.

Corophini, Leach, Ed. Enc. vii. p. 403. Podoceridæ, Leach, Ed. Enc. vii. p. 432. Crevettes marcheuses, M. Edw. Crust. iii. p. 58. Corophidæ, Dana, Amer. Journ. viii. (2nd ser.)

#### 1. JASSA.

Cerapus, Say, Journ. Acad. Sc. Phil. i. p. 49 (1817). Jassa, Leach, Ed. Enc. vii. p. 433 (1814 or 1815).

### 1. JASSA PELAGICA. Bell Rock Rock-Screw.

Cerapus pelagicus, M. Edw. Crust. iii. p. 61; Cuv. R. A. (Croch.) t. 61, f. 2.

Jassa pelagica, Leach, Ed. Enc. vii. p. 433; Linn. Trans. xi. p. 561; Desm. Cons. p. 270.

a-g. Scotland (Bell Rock). Presented by R. Stevenson, Esq.

## 2. Jassa Palcata. Montagu's Rock-Screw.

Cancer (Gammarus) falcatus, Mont. Linn. Trans. ix. t. 5, f. 2. Cerapus falcatus, Thomp. Ann. Nat. Hist. xx. p. 244. Cerapus pelagieus, pt. M. Edw. Crust. iii. p. 61.

a. Devon (Torcross). From the collection of Col. Montagu.

#### 2. PODOCERUS.

Podocerus, pt. Leach, Ed. Enc. vii. p. 433. Jassa, pt. Leach, Ed. Enc. vii. p. 433.

## 1. PODOCERUS VARIEGATUS. Leach's Seaweed-Screw.

Podocerus variegatus, Leach, Ed. Enc. vii. p. 433; Linn. Trans. xi. p. 361; Desm. Cons. p. 269; Edw. Ann. Sc. Nat. xx. p. 384; Crust. iii. p. 63; Cuv. R. A. (Croch.), t. 64, f. 4.

British Coast (amongst Algæ).

a-f. Devon, &c. From the collection of Dr. Leach.

2. Podocerus pulchellus. Sea-weed Pretty Screen

Podocerus pulchellus, M. Edw. Ann. Sc. Nat. xx. p. 384 iii. p. 64.

Jassa pulchella, Leach, Ed. Enc. vii. p. 433; Linn. Tran 361; Desm. Cons. p. 269; Cuv. R. A. (Croch.) t. 61, f. 8

a-g. S. Devon (amongst Fuci). From the collections
Montagu and Dr. Leach.

### 3. COROPHIUM.

Corophium, Latr. Gen. Crust. et Ins. i. p. 58, 1806 (longico Oniscus, pt. Pallas. Gammarus, pt. Fabr. Ent. Syst. ii.

1. Corophium Longicorne. Long-horned Mud-Live

Corophium longicorne, Latr. Gen. Crust. et Ins. i. p. 59 Meth. x. 164, 165; Lam. Hist. An. sans Vert. v. p. 184 Ed. Enc. vii. p. 403; Linn. Trans. xi. p. 362; Desm. Con f. 1; Guer. Icon, t. 27, f. 1; Edw. Ann. Sc. Nat. xx. Crust. iii. p. 66.

SEE.

Gammarus longicornis, Fabr. Ent. Syst. ii. p. 515; Roem Ins. t. 33, f. 6,

Astacus linearis, Penn. Brit. Zool. (edit. 1777) iv. p. 17

Oniscus volutator, Pallas, Spic. Zool. ix. p. 59, t. 4, f. 9.

a-d. Norfolk (Clay), Mouth of Medway (amongst mud). the collection of Dr. Leach.

## FAM. IV. CHELURIDÆ.

Cheluridæ, Dana, Amer. Journ. viii. (2nd ser.)

# 1. CHELURA.

Chelura, Philippi, Wiegm. Arch. 1839.
Nemertes, Leach, MSS.; White, List of Crust. in Br
1847, p. 90 (no description).

### 1. CHELURA TEREBRANS. Sea Wood-Borer.

Chelura terebrans, Philippi, Wiegm. Arch. 1839; Allman, Ann. and Mag. Nat. Hist. xix. p. 361, t. 13.

Nemertes neswoides, Leach, MSS.; White, List of Crust. in Brit. Mus. (1847) p. 90.

a-d. Britain. From the collection of Dr. Leach.

e, f. Dublin Bay (King's Town). Presented by W. Thompson, Esq.

g-j. Ayrshire (Ardrossan). Presented by Major Thompson.

# Tribe 4. HYPERITA.

Hyperines, M. Edw. Crust. iii. p. 70. Gammarinæ, pt. Latr. Gen. Crust. et Ins. i. p. 56. Uroptera, pt. Latr. Fam. Nat. p. 289. Hyperiacea, Dana, Amer. Journ. viii. (2nd ser.)

## FAM. I. PHRONIMADÆ.

Hyperines ordinaires, M. Edw. Crust, iii. p. 74. Phronymadæ, Leach, Sam. Ent. U. Comp. p. 101.

## 1. HYPERIA.

Hyperia, Latr. Desm. Cons. p. 259 (1825). Hiella, Strauss, Mem. Mus. xviii. Lanceola, pt. Say, Journ. Acad. Phil.

# 1. HYPERIA LATREILLII. Latreille's Hermit-Screw.

Hyperia Latreillii, M. Edw. Ann. Sc. Nat. xx. p. 388, t. 11, f. 1; Crust. iii. p. 76; Cuv. R. A. (Croch.) t. 58, f. 1; Guerin, Icon. t. 25, f. 5; Thomp. (W.) Ann. Nat. Hist. xx. p. 244. Hiella Orbignii, Strauss, Mem. Mus. xviii. t. 4.

a-d. British Coast. From the collection of Dr. Leach.

# 2. Hyperia Galba. Montagu's Hermit-Screw.

Hyperia galba, M. Edw. Crust. iii. p. 77; Thomp. (W.) Ann. Nat. Hist. xx. p. 244.

Cancer (Gammarus) galba, Mont. Linn. Trans. xi p. 4, t. 2, f. 2. Callianira galba, Leach, MSS.

a-e. S. Coast of Devon. From the collection of Col. Montagu.

#### 2. PHRONIMA.

Phronima, Latr. Hist. Nat. Crust. vi. p. 289 (1803); Gen. Crust. et Ins. i. p. 56.
Phronyma, Leach, Sam. Ent. U. Comp. p. 101.
Cancer, pt. Forskäl, Descr. Anim.

### 1. Phronima sedentaria. Dr. Fleming's Hermit-Screw.

Phronima sedentaria, Latr. Hist. Nat Crust. vi. p. 292; Gen. Crust. et Ins. i. p. 56, t. 2, f. 2, 3; Lam. Hist. An. sans Vert. v. p. 197; Leach, Linn. Trans. xi. p. 355; Desm. Cons. p. 257; M. Edw. Ann. Sc. Nat. 2nd ser. iii. t. 14, f. 9; Crust. iii. p. 93; Cuv. R. A. (Croch.) t. 58, f. 3; Lucas, Expl. Alger. t. 5, f. 5. Cancer sedentarius, Forsk. Descr. Anim. p. 95. Cancer (gammarellus) sedentarius, Herbst, ii. t. 37, f. 8.

a. Burray, Shetland Islands. Presented by the Rev. Dr. Fleming.

# FAM. II. TYPHIDÆ.

Decempedes, pt. Latr. Fam. Nat. p. 289 (1825). Hyperines abnormales, M. Edw. Crust. iii. p. 94 (1840).

#### 1. TYPHIS.

Typhis, Risso, Crust. Nice. Gammarus, pt. Mont. Linn. Trans. xi. p. 5? Gammarus nolens, Johnston, Zool. Journ. iii. p. 179. Berwickshire Coast.

# ORDER IV. LÆMODIPODA.

Læmodipoda, Latr. Fam. Nat. p. 285 (1825). Gasteruri, pt. Leach, Ed. Enc. vii. p. 432. Tetradecapoda, Haan, Faun. Jap. Exp. p. 16 (1833). Læmodipodes, M. Edw. Crust. iii. p. 103. 1sopodes Cystibranches, Latr. (Cuv. R. A. iii. p. 50) 1817. Caprellini, Leach, Ed. Enc. vii. p. 403. Caprelladæ, Leach, Sam. Ent. U. Comp. p. 105 (1819).

### FAM. I. CAPRELLIDÆ.

Filiformia, Latr. Fam. Nat. p. 287. Caprellidæ, Westw. Ent. Text-Book, p. 108. Caprelliens ou Læmadipodes filiformes, M. Edw. Crust. iii. p. 105.

#### 1. CAPRELLA.

Caprella, Lam. Syst. An. sans Vert. p. 165 (Scolopendroides), 1801. Squilla, pt. Müller, Zool. Dan. Oniscus, pt. Pallas. Gammarus, pt. Fabr.

### 1. Caprella linearis. Pennant's Skeleton-Screw.

Caprella linearis, Latr. Hist. Crust. vi. p. 324, t. 57, f. 2-5; Desm. Cons. p. 278; M. Edw. Crust. iii. p. 106; Goodsir, Edin. New Phil. Journ. xxxiii, p. 190, t. 3, f. 8; Johnston, Mag. Nat. Hist. viii. p. 672, f. 71. Cancer linearis, Linn. Syst. Nat. ii. p. 1056; Herbst, ii. t. 36, f.

9, 10.

Cancer (Astacus) atomos, Penn. Brit. Zool. (edit. 1777) iv. p. 17, t. 12, f. 32; Baster, Opusc. Subs. t. 4, f. 2. Caprella Penantis (Pennantii), Leach, Ed. Enc. vii. p. 404. Oniscus scolopendroides, Pallas, Spic. Zool. ix. p. 78, t. 4, f. 15. Squilla quadrilobata, Müller, Zool. Dan. ii. t. 36, f. 4, 6, 3, iii. t.

114, f. 11, 12, Q.

Caprella lobata, Guerin, Icon. t. 28, f. 2.

a. British Coast (Devon). From the collection of Dr. Leach.
 b—d. Firth of Forth. Presented by Henry Goodsir, Esq. Surg.
 R.N.

- 2. CAPRELLA LEVIS. Smooth Skeleton-Screw.
- Caprella lævis, Goodsir, Edin. New Phil. Journ. xxiii, p. 189, t. 3, f. 4.
- a. Firth of Forth. Presented by Henry Goodsir, Esq., Surg., R.N.
  - 3. CAPRELLA ACANTHIFERA. Spined Skeleton-Screw.
- Caprella acanthifera, Leach, Ed. Enc. vii. p. 404; Leach, Desm. Cons. p. 277; M. Edw. Crust. iii. p. 107, t. 33, f. 1; Queronic. Mem. Sav. &c. iii. p. 329, f. A. B.; Thomp. (W.) Ann. Nat. Hist. xx. p. 245.
- a-h. British Coast. From the collection of Dr. Leach.
  - 4. CAPRELLA ACUTIFRONS. Leach's Skeleton-Screw.

Caprella acutifrons, Desm. Cons. p. 277; M. Edw. Crust. iii. p. 108.

Caprella atomos, Leach.

- a—g. British Coast From the collections of Dr. Leach and Col. Montagu.
  - 5. CAPRELLA PHASMA. Montagu's Skeleton-Screw.

Caprella phasma, Latr. Enc. Meth. t. 336, f. 37; M. Edw. Crust. iii, p. 108.

Cancer phasma, Mont. Linn. Trans. vii. p. 66, t. 6, f. 3.

- a. S. Coast of Devon. From the collection of Col. Montagu.
  - 6. CAPRELLA TUBERCULATA. Goodsir's Skeleton-Screw.
- Caprella tuberculata, Goodsir, Edin. New Phil. Journ. xxxiii. p. 188, t. 3, f. 6; Guerin, Icon. t. 28, f. 1? Thomp. (W.) Ann. Not. Hist. xx. p. 244.
- a. Firth of Forth. Presented by Henry Goodsir, Esq., Surg., R.N.

#### 7. CAPRELLA LOBATA.

Caprella lobata, Müller, Kroyer, Voy. Scand. et Lapon. Crust. pl. 25, f. 3, a.; Thomp. (W.) Ann. Nat. Hist. xx. p. 244.

Ireland.

### 2. PROTO.

Leptomera, Latr. R. A. (Cuv.) iii. p. 51 (1817). Proto, pt., Leach, Linn. Trans. xi. p. 362, 1814 (not Oken.)

## 1. PROTO PEDATA. Müller's Spectre Shrimp.

Proto pedata, Leach, Linn. Trans. xi. p. 362.

Proto pedatum, Desm. Cons. p. 276, t. 46, f. 3; Johnston, Mag. Nat. Hist. viii. p. 673, f. 72, 73; M. Edw. Crust. iii. p. 109.

Gammarus pedatus, Müller, Zool. Dan. iii. t. 194, f. 1, 2; Mont. Linn. Trans. xi. t. 2, f. 6.

Leptomera pedata, Guerin, Icon. t. 28, f. 3.

a—c. British Coast. From the collection of Col. Montagu.

# FAM. II. CYAMIDÆ.

Læmodipodes ovalaires ou Cyamiens, M. Edw. Crust. iii. p. 110. Gammarinæ, pt. Latr. Gen. Crust. et Ins. i. p. 56. Ovalia, Latr. Fam. Nat. p. 286. Cyamidæ, Westw. Ent. Text-Book, p. 108.

#### 1. CYAMUS.

Cyamus, Latr. Lam. Syst. An. sans Vert. v. p. 166 (1801); Latr. Gen. Crust. et Ins. i. p. 59.

Panope, Leach, Ed. Enc. vii. p. 404.

Larunda, Leach, Linn. Trans. xi. p. 363 (1814, 1815).

Pediculus, Seba.

Oniscus, sp. Linn. Syst. Nat.

Squilla, sp. Degeer, Ins. vii.

Pycnogonum, sp. Fabr. Ent. Syst. Suppl. p. 570 (1798).

#### 1. CYAMUS CETI. Common Whale-louse.

Cyamus erraticus, Rouss. An. Sc. Nat. 2nd ser. i. p. 259, t. 8, f. 22, 23; M. Edw. Crust. iii. p. 113.

Oniscus ceti, Linn. Syst. Nat. ii. p. 1060; Pall. Spic. Zool. ix. t. 4, f. 14; Müller, Zool. Dan. iii. t. 119, f. 13, 17.

Squilla ceti, Degeer, Ins. vii. t. 42, f. 7, 8.

Cyamus ceti, Latr. Hist. Crust. vi. t. 52, f. 4.

Panope ceti, Leach, Ed. Enc. vii. p. 404.

Larunda ceti, Leach, Linn. Trans. xi. p. 364; Sam. Ent. U. Comp. p. 106.

a-f. British Seas. '

#### 2. CYAMUS OVALIS. Oval Whale-louse.

Cyamus ovalis, Rouss. Ann. Sc. Nat. 2nd ser. i. t. 8, f. 24; M. Edw. Ann. Sc. Nat. 2nd ser. iii. t. 14, f. 13, 14; Guerin, Icon. t. 28, f. 4.

British Seas.

#### 3. CYAMUS GRACILIS. Slender Whale-louse.

Cyamus gracilis, Rouss. Ann. Sc. Nat. 2nd. ser. i. t. 8, f. 24; M. Edw. Crust. iii. p. 113.

a. British Seas.

^{***} Here by many authors are placed Nymphon, Pycnogonum, and their allies.

# ORDER V. ISOPODA.

Isopoda, Latr. Fam. Nat. p. 290. Tetradecapoda, pt. Haan, Faun. Jap. Exp. p. 16 (1833). Oniscus, pt. Fabr. Syst. Ent. p. 296 (1775). Insecta tetracera, Latr. Gen. Crust. et Ins. i. p. 63. Gasteruri, pt. Leach, Ed. Enc. vii. p. 432.

### SUB-ORDER I. ISOPODA AMBULANTIA.

Isopodes marcheurs, M. Edw. Crust. iii. p. 120 (1840).

### Tribe 1. IDOTEITA.

Idoteides, Latr. Fam. Nat. p. 296; M. Edw. Crust. iii. p. 121 (1840).
Asellota, pt. Latr. Gen. Crust. et Ins. i. p. 63 (1806).

# FAM. I. ARCTURIDÆ.

Idotéides arpenteuses, M. Edw. Crust. iii. p. 122. Idoteadæ, pt. Westw. Ent. Text-Book.

#### 1. ARCTURUS.

Arcturus, Latr. R. A. iv. p. 139. Leachia, Johnston, Edin. Phil. Journ. xiii. 220. Astacilla, Fleming, Enc. Brit. vii. p. 502. Oniscus, sp. Sowerby, Brit. Misc. Idotea, sp. Sabine, Parry's Voy. Append.

# 1. ARCTURUS LONGICORNIS. Sowerby's Arcturus.

Arcturus longicornis, Westw. Trans. Ent. Soc. i. 72, t. 16; Guerin, Icon. t. 31, f. 2; M. Edw. Crust. iii. p. 124.

Oniscus longicornis, Sowerby, Brit. Misc. t. 19.

Leachia lacertosa, Johnston, Edin. Phil. Journ. xiii. p. 220.

Astacilla longicornis, Fleming, Edin. Enc. vii. p. 502; Johnston, Loud. Mag. Nat. Hist. viii. p. 494, f. 44, adult, ix. p. 80, f. 15, young.

a—e. Cullercoats, Northumberland. Presented by Dr. Clarke, of Ipswich.

f. Firth of Forth. Presented by Henry Goodsir, Esq., Surg., R.N.

#### 2. ARCTURUS INTERMEDIUS.

Leachia intermedia, Goodsir, Edin. New Phil. Journ. xxxi. p. 309, t. 6, f. 1.

a. Firth of Forth. Presented by Henry Goodsir, Esq., Surg., R.N.

# 3. ARCTURUS GRACILIS. Goodsir's Arcturus.

Leachia gracilis, Goodsir, Edin. New Phil. Journ. xxxi. p. 310, t. 6, f. 4.

a. Firth of Forth. Presented by Henry Goodsir, Esq., Surg., R.N.

# FAM. II. IDOTEADÆ.

Idoteadæ, pt. Leach, Sam. Ent. U. Comp. p. 106. Anthuradæ, pt. Leach, Sam. Ent. U. Comp. p. 107. Idotéides ordinaires, M. Edw. Crust. iii, p. 124. Sphæromides, I. pt. Latr. Fam. Nat. p. 294.

# 1. IDOTEA.

Idotea, Latr. Hist. Nat. Crust. vi. p. 360; M. Edw. Crust. iii. p. 125.

Cymothoa, pt., Fabr. Ent. Syst. ii.

Idotea, pt. Fabr. Ent. Syst. Suppl. p. 302 (1798).

Rhætia, pt. Leach, MSS.

Stenosoma, pt. Leach, Ed. Enc. vii. p. 304 (hecticus).

Idotea, pt. Leach, Ed. Enc. vii. p. 404 (entomon).

Saduria, pt. Leach, MSS. ("Siduria"); M. Edw. Crust. iii. p. 126. Leptosoma, Risso, Eur. Mer. v. p. 107.

Zenobia, Risso, Eur. Mer. v. 110.

Armida, Risso, Eur. Mer. v. 109. Gonotus, Raf. Prec. p. 26. Oniscus, pt. Linn. Entomon, Klein. Squilla, pt. Degeer, Mem. vii. Asellus, pt. Oliv. Enc. Meth. iv.

Dr. Leach.

#### 1. IDOTEA PELAGICA. Marine Idotea.

Idotea pelagica, Leach, Linn. Trans. xi. p. 365; Desm. Cons. p. 289; M. Edw. Crust. iii. p. 129.
Oniscus balticus, Pallas, Spic. Zool. ix. t. 4, f. 6?
Idotea marina, Fabr. Ent. Syst. Suppl. p. 303?
Rhætia pelagica, Leach, MSS.

a—g. British Coast. (Bell Bock). From the collections of Col. Montagu and Dr. Leach.

#### 2. IDOTEA TRICUSPIDATA. Three-toothed Idotea.

Idotea tricuspidata, Desm. Cons. p. 289; Roux, Crust. Med. t. 13. f. 11, 12; M. Edw. Crust. iii. p. 129.
Oniscus tridens, Scop. Ent. Carn.
Idotea entomon, Leach, Linn. Trans. xi. p. 364.
Idotea tridentata, Latr. Gen. Crust. et Ins. i. p. 64.

a-z. British Coast, Scotland and England. From the collections of Col. Montagu and Dr. Leach.
 a*-c.* Cornwall. Presented by W. P. Cocks, Esq.

#### 3. Idotea emarginata. Notched Idotea.

Idotea emarginata, Fabr. Ent. Syst. Suppl. p. 303; M. Edw. Crust. iii. p. 130; Cuv. R. A. (Croch.) t. 69, f. 2. Cymothoa emarginatu, Fabr. Ent. Syst. ii. p. 508. Squilla marina, Degeer, Ins. vii. p. 522, t. 32, f. 11, 14. Idotea excisa, Bosc. Crust. ii. p. 181; Latr. Crust. vi. t. 58, f. 5, var.?

Idotea peloponesiaca, Roux, Crust. Med. t. 30, f. 10.

a—s. British Coast. From the collections of Col. Montagu and

### 4. IDOTEA LINEARIS. Slender-bodied Idotea.

Idotea linearis, Latr. Hist. Crust. vi. p. 371; M. Edw. Crust. iii. p. 132.

Oniseus entomon, Baster, Opusc. Subs. ii. t. 13, f. 2.

Oniscus linearis, Penn. Brit. Zool. (edit. 1777) iv. t. 18, f. 2.

Squilla marina, Degeer, Ins. vii. t. 32, f. 11.

Stenosoma lineare, Leach, Linn. Trans. xi. p. 366; Desm. Cons. p. 290, t. 46, f. 12; Guérin, Exp. Morée, p. 49.

"Idotea diodon, Latr."; Guerin, l. c.

British Coast.

a-m. Devon (Ilfracombe). From the collections of Col. Montagu, &c.

## 5. IDOTEA ACUMINATA. Pointed long Idotea.

Stenosoma acuminatum, Leach, Ed. Enc. vii. p. 433; Linn. Trans. xi. p. 366.

British Coast.

a. Devon. From the collection of Dr. Leach.

## 5. IDOTEA APPENDICULATA. Risso's long Idotea.

Idotea appendiculata, M. Edw. Crust. iii. p. 135.

Leptosoma appendiculata, Risso, Hist. Nat. l'Eur. Mer. v. p. 107, t. 4, f. 23.

Leptosoma lancifer, Leach, MSS.

a—c. Coast of Devon (Sidmouth). From the collection of Dr. Leach.

#### 2. ANTHURA.

Anthura, Leach, Ed. Enc. vii. p. 404. Oniscus, sp. Mont. Linn. Trans. ix.

# 1. ANTHURA GRACILIS. Slender Anthura.

Anthura gracilis, Leach, Ed. Enc. vii. p. 404; Linn. Trans. xi. p. 366; Desm. Cons. p. 291, t. 46, f. 13; Guerin, Icon. t. 30, f. 6; M. Edw. Crust. iii. p. 136, t. 31, f. 3.

Oniscus gracilis, Mont. Linn. Trans. ix. p. 103, t. 5, f. 6.

a-c. Coast of Devon. From the collection of Col. Montagu.

#### 2. ANTHURA CYLINDRICA.

Anthura cylindrica, Leach, Linn. Trans. xi. p. 366. Oniscus cylindricus, Mont. Linn. Trans. vii. t. 6, f. 8. South of England.

#### Tribe 2. ASELLITA.

Asellotes, M. Edw. Crust. iii. p. 137. Asellota, pt. Latr. Gen. Crust. et Ins. i. p. 63 (1806).

### FAM. I. APSEUDIDÆ.

Heteropa, Latr. Fam. Nat. p. 290 (1825). Asellotes heteropodes, M. Edw. Crust. iii. p. 137. Apseudii, Leach, Ed. Enc. vii. p. 404. Apseudiadæ, Leach, Sam. Ent. U. Comp. p. 109.

#### 1. APSEUDES.

Apseudes, Leach, Ed. Enc. vii. p. 404. Eupheus, pt. Desm. Crust. p. 284.

# 1. APSEUDES TALPA. Mole Hog-louse.

Apseudes talpa, Leach, Ed. Enc. vii. p. 404; Linn. Trans. xi. p. 372; Lam. Hist. Nat. An. sans Vert. v. p. 290; M. Edw. Crust. iii. p. 140.

Cancer (Gammarus) talpa, Mont. Linn. Trans. ix. p. 98, t. 4, f. 6.

Eupheus talpa, Desm. Cons. t. 46, f. 9.

a-h. Devon (Salcombe). From the collection of Col. Montagu.

#### 2. TANAIS.

Tanais, M. Edw. Ann. Sc. Nat. xiii. p. 288. Gammarus, pt. Audouin, Expl. Pl. Egypte.

# 1. TANAIS DULONGIL. Dulong's Mole Hog-louse.

Tanais Dulongii, M. Edw. Crust. iii, p. 142; Thomp. (W.) Ann. Nat. Hist. xx. p. 245.
Gammarus Dulongii, Audouin, Expl. Pl. Egypte. t. 11, f. 1.
Irish Coast.

## FAM. I. LIMNORIADÆ.

Asellotes Homopodes, M. Edw. Crust. iii. p. 143. Cymothoadæ, pt. Leach, Sam. Ent. U. Comp. p. 107. Asellidæ, pt. Leach, Sam. Ent. U. Comp. p. 110. Cymothoades, I. 2, pt. Latr. Fam. Nat. p. 293. Asellota, pt. Latr. Fam. Nat. p. 295. Cymothoidæ, pt. Westw. Ent. Text-Book, iii.

### 1. LIMNORIA.

Limnorie, Leach, Ed. Enc. vii. p. 433.*

# 1. LIMNORIA TEREBRANS. Boring Limnoria.

Limnoria terebraus, Leach, Ed. Enc. Suppl. v. p. 433; Linn. Trans. xi. p. 371; Desm. Cons. p. 312; Coldstream, Edin. New Phil. Journ. xvi. p. 316, t. 6, f. 1—16; Hope, Trans. Ent. Soc. Lond. i. p. 119; Thomp. (W.) Edin. New Phil. Journ. xviii. p. 127; M. Edw. Crust. iii. p. 145.

The "Gribble," local name at Plymouth, Moore, Mag. Nat. Hist. (Charlesworth) ii. p. 206.

a-f. Bell Rock (Scotland). Presented by R. Stevenson, Esq. g, h. Ayrshire (Ardrossan). Presented by Major Martin.

j, k. Ireland (Belfast, Dublin, &c.). Presented by W. Thompson, Esq.

Coasts of Suffolk and Yorkshire, at Bridlington Harbour (Charles Lutwidge, Esq.), Kirby & Spence, Introd. to Ent. i. p. 238, 5th ed., p. 203, 6th ed.

* Dr. Leach quotes Wern. Trans. ii.; the paper was never published.

#### 2. ASELLUS.

Asellus, Geoff. Ins. Par. ii. p. 671 (1762); Latr. Gen. Crust. et Ins. i. p. 63.
Oniscus sp. Linn. Syst. Nat.
Squilla, sp. Degeer, Mem. vii.
Entomon, sp. Klein.
Cymothoa, sp. Fabr. Ent. Syst. ii. p. 505.
Idotea, sp. Fabr. Ent. Syst. Suppl. p. 303.

### 1. ASELLUS AQUATICUS. Water Hog-louse.

Asellus aquaticus, Olivi, Enc. Meth. iv. p. 252; Leach, Linn. Trans. xi. p. 373; Guerin, Icon. t. 31, f. 3; Geoff. Ins. Par. ii. t. 22, f. 2.

Oniscus aquaticus, Linn. Syst. Nat. ii. p. 1061.

Squilla asellus, Degeer, vii. t. 31, f. 1.

Cymothoa aquatica, Fabr. Ent. Syst. ii. p. 505.

Asellus vulgaris, Latr. Hist. Nat. Crust. vii. p. 359, t. 58, f. 1; Desm. Cons. p. 314, t. 49, f. 1, 2; M. Edw. Crust. iii. p. 146; Cuv. R. A. (Croch.) t. 70, bis.

Great Britain and Ireland. a—d. Near London (Fresh-water).

#### 3. JÆRA.

Jæra, Leach, Ed. Enc. vii. p. 434. Oniscus, sp. Montagu, MSS.

## 1. JARA ALBIFRONS. White-fronted Hog-louse.

Jæra albifrons, Leach, Ed. Enc. vii. p. 434; Linn. Trans. xi. p. 373; Desm. Cons. p. 316; M. Edw. Crust. iii. p. 150; Thomp. Ann. Nat. Hist. xx. p. 245.
Oniscus albifrons, Montagu, MSS.

a-h. Devon. From the collection of Col. Montagu.

#### 4. MUNNA.

Munna, Kroyer, Nat. Tidsk. ii. p. 612.

# 1. MUNNA KROYERI. Long-legged Hog-louse.

Munna Kroyeri, Goodsir, Edin. New Phil. Journ. xxxiii. p. 365, t. 6, f. 2; Thomp. (W.) Ann. Nat. Hist. xx. p. 247.

a. Firth of Forth. Presented by Henry Goodsir, Esq., Surg., R.N.

### 5. JANIRA.

Janira, Leach, Ed. Enc. vii. p. 434. Oniscoda, Latr. R. A. iv. p. 141.

## 1. Janira Maculosa. Spotted Hog-louse.

Oniscoda maculosa, Latr. R. A. iv. p. 141; M. Edw. Crust. iii. p. 151.

Oniscus maculosus, Montagu, MSS.

Janira maculosa, Leach, Ed. Enc. vii. p. 434; Linn. Trans. xi. p. 373.

a-e. S. Coast of Devon. From the collection of Col. Montagu.

# Tribe 3. ONISCITA.

Oniscides, Latr. Gen. Crust. et Ins. i. p. 67 (1806). Cloportides, Latr. Fam. Nat. p. 297. Oniscidæ, Westw. Ent. Text-Book, p. 111.

# Sub-tribe 1. HALONISCITA.

Cloportides maritimes, M. Edw. Crust. iii. p. 152.

## FAM. I. LIGIADÆ.

Ligia, Fabr. Ent. Syst. p. 301. Ligiadw, Leach, Sam. Ent. U. Comp. p. 111.

## 1. LIGIA.

Ligia, Fabr. Ent. Syst. iii. p. 153. Oniscus, sp. Linn. Syst. Nat. i. p. 1061. Cymothoa, sp. Fabr. Ent. Syst. p. 509.

#### 1. LIGIA OCEANICA. Great Sea Slater.

Ligia oceanica, Fabr. Ent. Syst. Suppl. p. 301; Latr. Hist. Crust. vii. p. 31; Leach, Linn. Trans. xi. p. 374; Desm. Cons. p. 317, t. 49, f. 3—4; Roux, Crust. Med. t. 13, f. 8; M. Edw. Crust. iii. p. 155; Brandt. Bullet. Mosc. vi. p. 172.

Oniscus oceanicus, Linn. Syst. Nat. ii. p. 1061; Penn. Brit. Zool.

(edit. 1777) iv. t. 18, f. 4.

Oniscus aquaticus, Baster, Opusc. Subs. ii. t. 13, f. 4.

Var. Ligia scopulorum, Leach, Ed. Enc. vii.; Linn. Trans. xi. p. 374.

a, b. British Coast. From the collections of Col. Montagu and Dr. Leach.

## Sub-tribe 2. GEONISCITA.

Cloportides Terrestres, M. Edw. Crust. iii. p. 158. Oniscidæ, Leach, Sam. Ent. U. Comp. p. 111. Mitosata, pt. Fabr. Ent. Syst. ii. p. 396 (1793).

# FAM. I. PORCELLIONIDÆ.

Porcellionides, M. Edw. Crust. iii. p. 159. Oniscides, Latr. Gen. Crust. et Ins. i. p. 67 (1806).

#### ONISCUS.

Oniscus, Latr. Hist. Nat. Crust. vii. p. 33 (1804). Oniscus, sp. Linn.

#### 1. ONISCUS ASELLUS. Land Slater.

Oniscus asellus, Linn. Syst. Nat. ii. p. 1061; Degeer, Ins. vii. t. 35, f. 1; Geoff. Ins. ii. t. 22, f. 1; Latr. Hist. Crust. vii. p. 42.
Oniscus murarius, Cuv. Journ. d'Hist. Nat. ii. t. 26, f. 11; Brandt. and Ratz. Arzn. ii. t. 12, f. 7; Brandt. Bullet. Mosc. vi. p. 182; M. Edw. Crust. iii. p. 163.

Pig-louse, Slater, Wood-louse, Carpenter (local names).

a-l. London.

m-s. London. Presented by Francis Walker, Esq. t-u. Edinburgh. Presented by Adam White, F.L.S.

#### 2. PHILOSCIA.

Philoscia, Latr. Hist. Nat. Crust. vii. p. 43 (1804). Oniscus, sp. Scopoli.

### I. PHILOSCIA MUSCORUM. Shade-lover.

Oniscus sylvestris, Fabr. Ent. Syst. ii. p. 397. Oniscus muscorum, Scopoli, Ent. Carn. p. 1145; Cuv. Journ. d'Hist. Nat. i. t. 26, f. 6, 7; Coquebert, Ill. Icon. t. 6, f. 12. Philoscia muscorum, Latr. Hist. Crust. vii. p. 43; Leach, Linn. Trans. xi, p. 375; Desm. Cons. p. 319. a-l. Britain (in moist places).

#### 3. PORCELLIO.

Porcellio Latr. Hist, Nat. Crust. vii. p. 45. Oniscus, sp. Linn.

# 1. Porcellio scaber. Rough Hog-louse.

Porcellio scaber, Latr. Hist. Crust. vii. p. 45; Leuch, Linn. Trans. xi. p. 375; Desm. Cons. 321; Guerin, Icon. t. 31, f. 7; M. Edw. Crust. iii. p. 167; Cuv. R. A. (Croch.) t. 71, f. 1. Oniscus granulatus, Lam. Hist. An. sans Vert. v. p. 261.

Porcellio dilatatus, Brandt. and Ratz. Arzn. t. 12, f. 6; Brandt. Bullet. Mosc. vi. p. 176.

From the collections of Col. Montagu and Dr. a-r. Britain. Leach.

# 2. Porcellio Lævis. Smooth Hog-louse.

Porcellio levis, Latr. Hist. Crust. vii. p. 46; M. Edw. Crust. iii. p. 169.

a. England. From the collection of Dr. Leach.

### FAM. VII. ARMADILLIDÆ. .

Armadilliens, M. Edw. Crust. iii. p. 175.

#### 1. ARMADILLO.

Armadillo, pt. M. Edw. Crust. iii. p. 177. Armadillo, pt. Latr. Hist. Nat. Crust. vii. p. 47. Armadillidium, pt. Brandt. Consp. Oniscus, sp. Linn. Syst. Nat.

### 1. Armadillo vulgaris. The Pill-millepede.

Armadillidium vulgare, M. Edw. Crust. iii. p. 184.

Armadillo vulgaris, Latr. Hist. Crust. vii. p. 48; Leach, Ed. Enc. vii. p. 406; Sam. Ent. U. Comp. p. 112; Desm. Cons. p. 325.

a—v. Near London. From the collection of Dr. Leach.

### SUB-ORDER IV. ISOPODA NATANTIA.

Isopodes nageurs, M. Edw. Crust. iii. p. 189. Amphipoda, pt. Latr. Fam. Nat. p. 289.

# FAM. I. PRANIZIDÆ.

Pranisiens, M. Edw. Crust. iii. p. 191. Decempedes, pt. Latr. Fam. Nat. p. 289.

#### 1. PRANIZA.

Praniza, Leach, Latr. R. A. iii. p. 54 (1817). Oniscus, sp. Slabber, Montagu.

### 1. PRANIZA CÆBULEATA. Bluish Praniza.

Praniza cæruleata, Desm. Cons. p. 284, t. 46, f. 8; Westw. Ann. Sc. Nat. xxvii, p. 326, t, 6, f. 5; M. Edw. Crust. iii. p. 194, t. 33, f. 10.

Oniscus cæruleatus, Mont. Linn. Trans. xi. p. 15, t. 4, f. 2. Gnathia termitoides, male, Leach (olim.), Ed. Enc. vii. p. 402. a. Devonshire. From the collection of Col. Montagu.

# 2. PRANIZA MONTAGUI. Montagu's Praniza.

Praniza Montagui, Westw. Ann. Sc. Nat. xxvii. p. 327. Oniscus caruleatus, var.? British Coast.

# 3. PRANIZA MACULATA. Spotted Praniza.

Praniza maculata, Westw. Ann. Sc. Nat. xxvii. p. 326, t. 6, f. 4-25; M. Edw. Crust. iii. p. 195. Coast of Shetland.

### 4. PRANIZA FUSCATA. Brown Praniza.

Praniza fuscata, Johnston, Mag. Nat. Hist. v. p. 520, f. 99. Berwick.

## FAM. II. ANCEADÆ.

Anceens, M. Edw. Crust. iii. p. 196. Gnathionii, Leach, Ed. Enc. vii. p. 402. Gnathides, Leach, Ed. Enc. vii. p. 432. Decempedes, pt. Latr. Fam. Nat. p. 289.

### 1. ANCEUS.

Anceus, Risso, Crust, Nice. p. 52. Gnathia, Leach, Ed. Enc. vii. p. 402. Cancer, sp. Montagu.

## 1. ANCEUS MAXILLARIS. Ant-like Jaw-bearer.

Anceus maxillaris, Lam. Hist. An sans Vert. v.; Desm. Cons. p. 283, t. 46, f. 6; Westw. Ann. Sc. Nat. xxvii. p. 329; M. Edw. Crust. iii. p. 197.

Cancer maxillaris, Mont. Linn. Trans. vii. p. 65, t. 6, f. 2.

Gnathia maxillaris, Leach, Enc. Brit.

Gnathia Termitoides, Leach, Ed. Enc. vii. p. 402. Oniscus cæruleatus, female l' Leach (olim.), Ed. Enc. vii. p. 402. Anceus rapax, M. Edw. Crust. iii. p. 196, t. 33, f. 12.

a—l. S. Coast of England. From the collections of Col. Montagu and Dr. Leach.

m. British Coast. Presented by Lady Curzon.

# Tribe 4. SPHÆROMITA.

Sphéromiens, M. Edw. Crust. iii. p. 197. Asellota, pt. Latr. Gen. Crust. et Ins. i. p. 65.

## FAM. I. SPHÆROMIDÆ.

Spheromiens onguiculés, M. Edw. Crust. iii. p. 199.

#### 1. SPHÆROMA.

Sphæroma, Latr. Hist. Nat. Crust. vii. p. 11 (1804). Oniscus, sp. Linn. Syst. Nat. Asellus, sp. Olivi, Enc. Meth. iv.

# 2. SPHEROMA SERRATUM. Serrated Sea Pill-ball.

Sphæroma serratum, Leach, Linn. Trans. xi. p. 368; Dict. des Sc. Nat. xii. p. 346; Desm. Cons. p. 301, t. 47, f. 3; Latr. Enc. Meth. x. 458; Guerin, Icon. t. 30, f. 1; M. Edw. Crust. iii. p. 205, t. 31, f. 11.

Oniscus serratus, Fabr. Mant. Ins. i. p. 242.

Oniscus globator, Pallas, Spic. Zool. ix. t. 4, f. 18.

Sphæroma cinerea, Bosc, Hist, Crust. ii. p. 186; Latr. Hist. Crust. vii. p. 16; Sav. Egypte, t. 12, f. 1.

a—n. British Coast (Kent, Devon, and Cornwall). From the collections of Col. Montagu and Dr. Leach.

# 3. SPHEROMA RUGICAUDA. Rough-tailed Sea Pill-Ball.

Sphæroma rugicauda, Leach, Ed. Enc. vii. p. 405, 433; Linn. Trans. xi. p. 369; Dict. Sc. Nat. xii. p. 346; Desm. Cons. p. 300; M. Edw. Crust. iii. p. 207.

a-g. Western Islands (I. of Ulva over against Mull). From the collection of Dr. Leach.

### 4. SPHEROMA HOOKERI. Hooker's Sea Pill-ball.

Sphæroma Hookeri, Leach, Ed. Enc. vii. p. 433; Linn. Trans. x. p. 369; Dict. Sc. Nat. xii. p. 345; Desm. Cons. p. 300; M. Edw. Crust. iii. p. 206.

a-d. Suffolk. Presented by Dr. (now Sir W. J.) Hooker.

### 5. SPHEROMA GRIFFITHSII. Griffith's Sea Pill-ball.

Sphæroma Griffithsii, Leach, MSS.; Thomp. (W). Ann. Nat. Hist. xx. p. 246.

a, b. Torbay. Presented by - Griffiths, Esq.

### 6. SPHEROMA PRIDEAUXIANUM. Prideaux's Sea Pill-ball.

Spheroma Prideauxianum, Leach, Dict. Sc. Nat. xii. p. 345;
Desm. Cons. p. 299; M. Edw. Crust. iii. p. 209; Thomp. (W.)
Ann. Nat. Hist. xx. p. 245.

Jun.? Sphwroma curtum, Leach, Dict. Sc. Nat. xii. p. 345; Desm. Cons. p. 299; M. Edw. Crust. iii. p. 209.

a. Devon. From the collection of Dr. Leach.

#### 3. CYMODOCEA.

Cymodocea, M. Edw. Crust. iii. p. 212. Cymodocea, pt. Leach, Dict. Sc. Nat. xii. p. 343. Dynamene, pt. Leach, Ed. Enc. vii. p. 433; Dict. Sc. Nat. xii. p. 344. Cymodoce, Leach, Ed. Enc. vii. p. 433. Cymodice, Leach, Linn. Trans. xi. p. 368.

# 1. CYMODOCEA TRUNCATA. Abrupt Sea Pill-ball.

Cymodocea truncata, Leach, Ed. Enc. vii. p. 433; Dict. Sc. Nat. xii. p. 343; Desm. Cons. p. 297; M. Edw. Crust. iii. p. 214; Thomp. (W.) Ann. Nat. Hist. xx. p. 246. Oniscus truncatus, Montagu, MSS.

a. Devon. From the collection of Col. Montagu.

2. CYMODOCKA EMARGINATA. Notched Sea Pill-ball.

Cymodocea emarginata. Leach, Dict. Sc. Nat. xii. p. 343; Desm. Cons. p. 296; M. Edw. Crust. iii. p. 214.

- Mount Edgecombe, near Plymouth. From the collection of Dr. Leach.
- b. Var. Falmouth. Presented by Mr. John Cranch.
  - 3. Cymodocea Montagui. Montagu's Sea Pill-ball.

Cymodocea Montagui, M. Edw. Crust. iii. p. 215. Dynamene Montagui, Leach, Dict. Sc. Nat. xii. p. 344; Desm. Cons. p. 298.

- a-d. Devon. From the collection of Col. Montagu.
  - 4. CYMODOCEA RUBRA. Reddish Sea Pill-ball.

Cymodocea rubra, M. Edw. Crust. iii. p. 216. Oniscus ruber, Montagu, MSS. Dynamene rubra, Leach, Dict. Sc. Nat. xii. p. 344; Desm. Cons. p. 298.

- a-e. Devon. From the collection of Dr. Leach.
  - 5. CYMODOCEA VIRIDIS. Green Sea Pill-ball.

Cymodocea viridis, M. Edw. Crust. iii. p. 216. Dynamene viridis, Leach, Dict. Sc. Nat. xii. p. 344; Desm. Cons. p. 298.

a-d. Devon. From the collection of Dr. Leach.

#### 4. NESÆA.

Nesæa, pt. Leach, Ed. Enc, vii. p. 405 (bidentata). Cilicæa, pt. Leach, Dict. Sc. Nat. xii. p. 342 (Latreillii). Næsea, M. Edw. Crust. iii. p. 216. Næsa, Leach, Linn. Trans. xi. p. 367. Oniscus, pt. Adams, Linn. Trans. v. Sphæroma, pt. Eichwald. Campecopea, pt. Rathke.

### 1. NESEA BIDENTATA. Adams' Sea Pill-ball.

Neswa bidentata, Leach, Ed. Enc. vii. p. 405; Linn. Trans. xi. p. 367; M. Edw. Crust. iii. p. 217; Desm. Cons. t. 47, f. 2. Oniscus bidentatus, Adams, Linn. Trans. viii. t. 2, f. 3, 4.

a—f. S. Coast of England. From the collections of Col. Montagu

and Dr. Leach.

g. Cornwall (Polperro). Presented by J. Couch, Esq.

#### 2. CAMPECOPEA.

Campecopea, Leach, Ed. Enc. vii. p. 405 (hirsuta). Oniscus, sp. Mont. Linn, Trans.

# 1. CAMPECOPEA HIRSUTA. Hairy Sea Pill-ball.

Campecopea hirsuta, Leach, Ed. Enc. vii. p. 405; Linn. Trans. xi. p. 367; Dict. Sc. Nat. xii. p. 341; Desm. Cons. t. 47, f. 1; Guerin, Icon. t. 30, f. 3; M. Edw. Crust. iii. p. 220. Oniscus hirsutus, Mont. Linn. Trans. vii. p. 71, t. 6, f. 7.

a—c. S. Coast of Devonshire. From the collection of Dr. Leach.

# 2. CAMPECOPEA CRANCHII. Cranch's Sea Pill-ball.

Campecopea Cranchii, Leach, Dict. Sc. Nat. xii. p. 341; Desm. Cons. p. 294; M. Edw. Crust. iii. p. 220.

a, b. Cornwall (Falmouth). From the collection of Mr. Cranch.

## Tribe 5. CYMOTHOITA.

Cymothoades, Latr. Fam. Nat. p. 292. Cymothoadiens, M. Edw. Crust. iii. p. 226. Asellota, pt. Latr. Gen. Crust. et Ins. i. p. 63.

## FAM. I. ÆGIDÆ.

Cymothoadiens errans, M. Edw. Crust. iii. p. 233.

#### CIROLANA.

Cirolana, Leach, Dict. Sc. Nat. xii. p. 347.

- 1. CIROLANA CRANCHII. Cranch's Fish-louse.
- Cirolana Cranchii, Leach, Dict. Sc. Nat. xii. p. 347; Desm. Cons. p. 303; M. Edw. Crust. iii. p. 236.
- a. Cornwall (Falmouth). From the collection of Mr. John Cranch.
  - 2. CIROLANA HIRTIPES. Hairy-legged Fish-louse.
- Cirolana hirtipes, M. Edw. Crust. iii. p. 236, t. 31, f. 25; Cuv. R. A. (Croch.) t. 67, f. 6; Thomp. (W.) Ann. Nat. Hist. xx. p. 246.

Ireland. (W. Thompson, Esq.)

#### 2. EURYDICE.

Eurydice, Leach, Linn. Trans. xi. p. 370.

## 1. EURYDICE PULCHBA. Pretty Fish-louse.

Eurydice pulchra, Leach, Linn. Trans. xi. p. 370; Dict. Sc. Nat. xii. p. 347; Desm. Cons. p. 302; M. Edw. Crust. iii. p. 238; Thomp. (W.) Ann. Nat. Hist. xx. p. 240.

a, b. Devon (Bantham). From the collection of Dr. Leach.

#### 3. ÆGA.

Æga, Leach, Linn. Trans. xi. p. 369. Oniscus, sp. Penn. Brit. Zool. Cymothoa, pt. Latr. R. A. iii. p. 55 (1817).

## 1. ÆGA BICARINATA. Two-keeled Fish-louse.

- Æga bicarinata, Leach, Dict. Sc. Nat. xii. p. 349; Desm. Cons. p. 305; M. Edw. Crust. iii. p. 241; Cuv. R. A. (Croch.) t. 67, f. 2.
- a. Britain. From the collection of Dr. Leach.

2. ÆGA TRIDENS. Leach's Three-toothed Fish-louse.

Ega tridens, Leach, Linn. Trans. xi. p. 370; M. Edw. Crust. iii. p. 242.

a-c. Belfast. Presented by Col. Portlock, R.E.

#### 3. CONILERA.

Conilera, Leach, Dict. Sc. Nat. xii. p. 348.

1. CONILERA CYLINDRACEA. Cylindrical Fish-louse.

Oniscus cylindraceus, Mont. Linn. Trans. vii. p. 71, t. 6, f. 8. Conilera Montagui, Leach, Linn. Trans. xi. p. 370; Dict. Sc. Nat. xii. p. 349; Desm. Cons. p. 305; M. Edw. Crust. iii. p. 242.

a. Devon From the collection of Col. Montagu.
b. Cornwall. Presented by D. W. Mitchell, Esq.

#### 4. ROCINELA.

Rocinela, Leach, Dict. Sc. Nat. xii. p. 349. Ega, pt. Johnston, Mag. Nat. Hist. vii. p. 233.

1. ROCINELA DANMONIENSIS. Devon Fish-louse.

Rocinela Danmoniensis, Leach, Dict. Sc. Nat. xii. p. 349; Desm. Cons. p. 304; M. Edw. Crust. iii. p. 244.

a. Devon (Plymouth). From the collection of Dr. Leach.

2. ROCINELA MONOPHTHALMA. Great-eyed Fish-louse.

Rocinela monophthalma, M. Edw. Crust. iii. p. 244. Æga monophthalma, Johnston, Mag. Nat. Hist. vii. p. 233, f. 43.

a. Berwick Bay (on Codfish). Presented by Dr. G. Johnston.

b. Northumberland. Presented by R. Howse, Esq.

### Tribe 6. EPICARIDITA.

Isopodes Sedentaires, M. Edw. Crust. iii. p. 277. Epicarides. Latr. Fam. Nat. p. 291. Vermes, pt. Leach, Ed. Enc. vii. p. 429 (olim).

### FAM. I. IONIDÆ.

Ioniens, M. Edw. Crust. iii. p. 279.

#### 1. IONE.

Ione, Latr. (Lam. Hist. An. sans Vert.) Oniscus, sp. Mont. Linn. Trans. ix. p. 103.

## 1. IONE THORACICUS. Mud Shrimp-louse.

Ione thoracicus, Latr. Lam. Hist. An. sans Vert. v. p. 170; Desm. Cons. p. 286, t. 46, f. 10; Guerin, Icon. t. 62, f. 1, 2; M. Edw. Crust. iii. p. 280, t. 33, f. 14, 15; Cuv. R. A. (Croch.) t. 59, f. 1.
Oniscus thoracicus, Mont. Linn. Trans. ix. p. 103, t. 5, f. 3.

a. Devon. From the collection of Col. Montagu.

# FAM. II. BOPYRIDÆ.

Bopyriens, M. Edw. Crust. iii. p. 281. Asellota, II., Latr. Gen. Crust. et Ins. i. p. 66 (1806).

### BOPYRUS.

Bopyrus, Latr. Hist. Nat. Crust. vii. p. 50 (1804). Monoculus, sp. Fabr.

## 1. Bopyrus squillarum. Shrimp-fixer.

Bopyrus squillarum, Latr. Hist. Crust. vii. p. 55, t. 59, f. 2; Gen. Crust. et Ins. i. p. 67, t. 2, f. 4; Lam. Hist. An. sans Vert. v. p. 164; Desm. Cons. p. 325, t. 49, f. 8—14; Guerin, Icon. t. 29; Exp. Morée. p. 46; M. Edw. Crust. iii. p. 282.

Monoculus crangorum, Fabr. Ent. Syst. Suppl. p. 306; Fouger,

Mem. Acad. Sc. 1772, p. 29, t. 1.

a-f. Devon. From the collections of Col. Montagu and Dr. Leach.

g—n. Sussex (Little Hampton). From the collection of Dr. Leach. o. Great Britain. Presented by Mrs. Mauger.

### SUB-CLASS II. ENTOMOSTRACA.

Entomostraca, Müller, Ent. 1785.
Monoculus. Linn. Syst. Nat. 1735.
Synistata, pt. Fabr. Syst. Ent. p. 294 (1775).
Crustaces sessiliocles, pt. Lam. Syst. An. sans Vert. 1801.
Agonata, pt. Fabr. Syst. Ent. ii. p. 419 (1775).
Ostracodermata, pt. Burm. Organ. der Trilob. t. opp. p. 38 (1843).
Branchioptéres, Blainv. Princ. Anat. Comp.
Entomostracés, Blainv. Princ. Anat. Comp.
Les Monocles, Jurine.

### LEGION I. BRANCHIOPODA.

Branchiopoda pt. Lam. Hist. An. sans Vert. 1818. Monoculus, Linn.

# ORDER I. PHYLLOPODA.

Phyllopoda, Latr. Hist. Nat. Crust. iv. p. 130 (1802); Gen. Crust. et Ins. i. p. 14 (pt.); Haan, Faun. Jap. (1833).

Lamellipedes, Lam. Hist. An. sans Vert. v.

Geans, Lam. l. c.

Clypeacés ou Aspidiotes, pt. Dumeril, Zool. Anal. p. 175.

Phyllopa, Latr. R. A. iv.

# Tribe 1. PHYLLOPODITA.

## FAM. I. APODIDÆ.

Apus, M. Edw. Crust. iii. p. 356. Phyllopoda, Leach, Ed. Enc. vii. Apidæ, Burm. Organ. der Trilob. t. opp. p. 38, 1843 (not Leach). Apodidæ, Baird, Brit. Ent. p. 18. Aspidiphora, pt. Latr. Fam. Nat. p. 301.

### 1. APUS.

Apus, Schaffer, Mon. (1756). Monoculus, Linn. Binoculus, Geoff. Ins. Par. II. Limulus, Müller; Lam. Syst. An. sans Vert. p. 169. Triopes, Schrank, Faun. Boic, iii. (1803).

### 1. Apus cancriformis. Shield-Shrimp.

Apus cancriformis, Schæffer, Mon. t. 1—5, 1756; Latr. Hist. Crust. iv. t. 19—27; Savigny, Mem. An. sans Vert. t. 7; Desm. Cons. t. 52, f. 1; Guerin, Icon. t. 34, f. 2; M. Edw. Crust. iii. p. 360; Croch. R. A. t. 75, f. 1; Baird, Brit. Ent. p. 30, t. 1. f. 1—3.

Scolopendra aquatica, Klein, Phil. Trans. 1737, p. 150, t. 1, f. 2.

Aπους, Frisch, Ins. x. t. 1, f. a-q.

Binoculus canda biseta, Geoff. Ins. ii. t. 21, f. 4. Monoculus apus, Linn. Syst. Nat. ii. p. 1058.

Limulus palustris, Müller, Ent. p. 127.

Binoculus palustris, Müller, Zool. Dan. Prod. p. 2407.

Limulus cancriformis, Lam. Syst. An. sans Vert. p. 169; Hist. An. sans Vert. v. p. 215.

Triopes palustris, Schrank, Faun. Boic. iii. p. 251.

Branchipus cancriformis, Schaffer, Elem. Ent. t. 29, f. 1, 2. Binoculus cancriformis, Leach, Dict. Sc. Nat. xiv. p. 538.

Apus Montagui, Leach, Ent. Brit. Suppl. i. p. 405, t. 20, f. 1—3; Sam. Ent. U. Comp. p. 78.

a. Hampshire (Christchurch). From the collection of Dr. Leach.
b, c. Bristol. Presented by W. Clayfield, Esq.
Bexley Common. (Rev. L. Brown).

# FAM. II. NEBALIADÆ.

Nebaliadæ, Leach, Sam. Ent. U. Comp. p. 100 (1819); Baird, Brit. Ent. p. 31 (1849). Schizopoda, II., pt. Latr. Fam. Nat. p. 282, Nebalidea, pt. Haan. Faun. Jap. Exp. p. 15 (1833).

#### 1. NEBALIA.

Nebalia, Leach, Zool. Misc. i. p. 99 (1814). Cancer, pt. Herbst. Monoculus, pt. Mont. Linn. Trans. ii.

#### 1. NEBALIA BIPES. The Nebalia.

Nebalia bipes, Baird, Rep. Brit. Assoc. 1847, p. 75; Brit. Ent. p. 36, t. 2, f. 1.

Cancer bipes, O. Fabr. Faun. Grænl. p. 246, f. 2; Herbst, ii. t. 34,

Nebalia Herbstii, Leach, Zool. Misc. i. t. 44; Linn. Trans. xi. p. 351; Desm. Cons. p. 243; Thomp. Zool. Res. t. 11, f. 1.

Monoculus rostratus, Mont. Linn. Trans. xi. t. 2, f. 5.

Nebalia Montagui, Thomp. Zool. Res. iii. t. 11, f. 2.

Nebalia glabra, Lam. An. sans Vert. v. p. 345.

Nebalia ciliata, Lam. l. c.

a—c. British Coast (under stones lying on mud amongst hollows of rock). Presented by C. Prideaux, Esq.
 d. Shetland. Presented by Robert M'Andrew, Esq.
 Coast of Devon (S. & S. W. Coast of England).
 W. Coast of Ireland.

# FAM. III. BRANCHIPODIDÆ.

Branchiopoda, Leach, Dict. Sc. Nat. xiv.
Branchipiens, M. Edw. Crust. iii. p. 364.
Branchipusidæ, Baird, Trans. Berw. Nat. Club, 1845.
Branchipidæ, Burm. Organ. der Tril. t. opp. p. 38 (1843).
Branchipodidæ, Baird, Brit. Ent. p. 38.
Ceratophthalma, Latr. Fam. Nat. p. 302.
Denudés ou Gymnonectes, pt. Dumeril, Zool. Anal. p. 177 (1806).

#### 1. CHIROCEPHALUS.

Chirocephalus, Prevost, Journ. de Phys. (1803). Ino, Schrank, Faun. Boic. (1803). Branchipus, Leach (nec. Schæff.) Cancer, Shaw. Branchiopoda, Leach, Sam. Ent. U. Comp. (1819).

## 1. CHIROCEPHALUS DIAPHANUS. The Lady-Shrimp.

Chirocephalus diaphanus, Prevost, Journ. de Phys. 57, p. 37; Jurine, Hist. p. 201, t. 20—22; Baird, Brit. Assoc. Rep. 1847, p. 75; Brit. Ent. p. 53, t. 3, f. 1, 2.

Squilla lacustris minima, Petiver, Gaz. t. 21, f. 7 (1709).

Branchipus paludosus, Desm. Cons. t. 56, f. 2, 5.

Branchipus Prevostii, Fisch. Bull. Mosc. vii.

Chirocephalus Prevostii, Thomp. Zool. Res. vii. t. 3, f. 4, 5, t. 4,

Branchipus chirocephalus, Guerin, Icon. t. 33, f. 3.

Branchiopoda stagnalis, Leach, Sam. Ent. U. Comp. p. 81.

Branchipus stagualis, Leach, Dict. Sc. Nat. xiv. p. 542; M. Edw. Croch. R. A. t. 74, f. 2.

Branchipus diaphanus, M. Edw. Crust. iii. p. 53.

Cancer stagnalis, Shaw, Linn. Trans. i. p. 103, t. 9, f. 4, 5.

Ino piscina, Schrank, Faun. Boic. iii. p. 249.

Remarkable Aquatic Insect, King, Phil. Trans. 1762, p. 72, t. 4.

a-c. Jump, near Plymouth. From the collection of Col. Montagu.

d—e. Near Chudleigh, Devon. From the collection of Col. Montagu.

f-j. Blackheath. Presented by Dr. Baird. Epping, Bristol, Brighton, Hammersmith.

#### 2. ARTEMIA.

Cancer, Linn. Syst. Nat. i. p. 1056. Gammarus, pt. Fabr. Syst. Ent. p. 419 (1775). Branchipus, pt. Latr. Artemia, Leach, Dict. Sc. Nat. xiv. Artemisus, Lam. An. sans Vert. Artemis, Thomp. (not Poli).

# 1. ARTEMIA SALINA. Brine-Shrimp.

Artemia salina, Leach, Dict. Sc. Nat. xiv. p. 543; Desm. Cons. p. 393; Aud. and Payen, Ann. Sc. Nat. 2me ser. vi. p. 219, x. p. 315; Joly, Ann. Sc. Nat. 2 ser. xii. t. 7, 8; M. Edw. Crust. iii. p. 370; Baird, Brit. Ent. p. 61, t. 2; f. 2—4.

Artemis salinus, Thomp. Zool. Res. v. p. 104, t. 1, f. 1—10, t. 2. Cancer salinus, Linn. Syst. Nat. xii. p. 1056.
Gammarus salinus, Racket, Linn. Trans. xi. p. 205, t. 14, f. 8—10; Penn. Brit. Zool. iv. p. 18.
Artemisus salinus, Lam. An. sans Vert. v. p. 199.
Branchipus salinus, Latr. Cuv. R. A. iii. p. 68.
Brine Worm, Schlosser, Gauth. Obs. Per. 1756, t.

a-z. Saltpans, Lymington, Hampshire. Presented by J. Abernethy, J. Coombe, and S. Stevens, Esqs.

# ORDER II. CLADOCERA.

Cladocera, Latr. Cuv. R. A. iv. p. 151.

Daphnides, Strauss, Mem. Mus. d'Hist. Nat. v.

Daphnoides, M. Edw. Crust. iii. p. 372.

Cladocéres, M. Edw. l. c.

Monophthalma, pt. Latr. Gen. Crust. et Ins. i. p. 17.

Ostracoda, I., pt. Latr. Fam. Nat. p. 300.

Lophyropoda, pt. Haan, Faun. Jap. Exp. p. 16 (1833); Burm. Organ. der Tril. t. opp. p. 38.

Bitestacés ou Ostracins, pt. Dumeril, Zool. Anal. p. 177 (1806).

Denudés ou Gymnonectes, pt. Dumeril, Zool. Anal. 177 (1806).

# Tribe 1. DAPHNITA.

Daphnia, Müller.
Daphnides, Strauss.
Daphnidiens, pt. M. Edw. Crust. iii. p. 374.
Daphniadæ, Baird, Brit. Ent. p, 62.

# FAM. I. DAPHNIADÆ.

Daphnina, Baird, Brit. Ent. p. 88.

#### 1. DAPHNIA.

Daphne, Müller, Zool. Dan. Prod. (not L.) Daphnia, Müller, Entom. Monoculus, Linn.

## 1. DAPHNIA PULEX. The Branched Water-Flea.

Daphnia pulex, Latr. Crust. iv. p. 223, t. 33, f. 2, 3; Strauss-Dürck. Mem. Mus. v. t. 29, f. 1—20; Desm. Cons. p. 372, t. 54, f. 3—5; Guerin, Icon. t. 33, f. 1; Baird, Ann. Nat. Hist. i. p. 254, t. 9, f. 1—12; M. Edw. Crust. iii. p. 379; Baird, Brit. Ent. p. 89, t. 6, f. 1—3, 3. \(\frac{1}{2}\). \(\frac{1}{2}\). \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\), \(\frac{1}{2}\

Monoculus pulex, Linn. Syst. Nat. ii. p. 1058; Jurine, Hist. Mon. p. 85, t. 8, f. 1, 2, t. 11, f. 3—5. Daphne pulex, Müller, Zool. Dan. Prodr. p. 2400. Daphnia pennata, Müller, Ent. p. 82, t. 12, f. 4-7. Branchipus conchiformis, Schæffer, Elem. Ent. t. 29, f. 3, 4. Monoculus, Bradley, Phil. Acc. p. 202, t. 25, f. 5. Pulex arborescens, Swammerdam, Hist. Ans. p. 68, t. 1; Bibl. Nat. t. 31, f. 1, 3. Animaletti aquatici, Redi. Obs. t. 16, f. 5. Puceron branchu, Tremblay, Mem. p. 92, t. 6, f. 3. Le Perroquet d'eau, Geoff. Ins. Par. ii. p. 655. Monoculus pulex ramosus, Degeer, Mem. vii. p. 442, t. 27, f. 1-4. Daphnia ramosa, Koch, Deutsch. Crust. p. 35, t. 18. Daphnia media, *Koch*, *l. c.* p. 37, t. 1. Daphnia ephippiata, Koch, l. c. p. 35, t. 16. Var. Daphnia magna, Strauss, Mem. Mus. v. t. 29, f. 21, 22; M. Edw. Crust. iii. p. 380; Tremblay, Mem. t. 6, f. 11. Var. Daphnia longispina, Müller, p. 88, t. 12, f. 8-10; Ramdohr, Beitr. p. 24, t. 7; Strauss, Mem. Mus. v. t. 29, f. 23, 24; M. Edw. Crust. iii. p. 380; Koch, Deuts. Crust. p. 35, t. 17. Monoculus longispina, Fabr.; Degeer, Mem. vii. t. 27, f. 1-4. Water-flea, with branched horns, Baker, Micr. t. 12, f. 14. a-c. Near London. From the collection of Dr. Leach.

## 2. DAPHNIA PSITTACEA. Parrot-beaked Water-flea.

Daphnia psittacea, Baird, Brit. Ent. p. 92, t. 9, f. 3, 4. a—f. Blackheath, Kent. Presented by Dr. Baird, F.L.S.

d-g. Highgate Ponds. Presented by Dr. Baird, F.L.S.

# 3. DAPHNIA SCHÆFFERI. The Large Water-flea.

Daphnia Schæfferi, Baird, Brit. Ent. p. 93, t. 7, f. 1, 2, t. 8, f. A 1. Wasserfloh, Schæff. t. 1, f. 8. Branchipus conchiformis primus, Schæff. El. Ent. t. 29, f. 3, 4. Daphnia pulex, Koch. Deuts. Crust. p. 35, t. 15. Daphnia, Rymer Jones, Outl. p. 330, f. 155. a—f. Kent (Bexley Heath). q—k. Middlesex (Norwood Green). Presented by Dr. Baird, F.L.S.

# 4. DAPHNIA VETULA. The Blunt-pointed Water-Sea.

Daphnia vetula, Müller, Zool. Dan. Prod. p. 199; Sulz. Ins. p. 266, t. 30, f. 10; Strauss-Durck. Mem. Mus. v. t. 29, f. 25, 26; Baird, Ann. Nat. Hist. i. p. 255, t. 9, f. 13; Proc. Berw. Nat. Club, ii. p. 148; Brit. Ent. p. 95, t. 10, f. 1—1 a.

Daphne vetula, Müller, Zool. Dan. Prod. No. 2399.

Daphnie vettin, Mutter, Zoot. Dan. Frot. No. 2539.

Daphnie sima, Mutter, Entomostr. p. 91, t. 12, f. 11, 12; Gruith. Nov. Act. Nat. Cur. xiv. 399, t. 24, f. 1—6; Desm. Cons. p. 373; M. Edw. Crust. p. iji. p. 382; Koch, Deuts. Crust. p. 35, t. 12.

Monoculus exspinosus, Deper, Mem. vii. p. 457, t. 27, f. 9—11.

Pulex non caudatus, Scheff. Mon. t. 1, f. 9.

Monoculus lævis, Fabr. Ent. Syst. ii. p. 492.

Monoculus conchaceus, Donov. Brit. Crust. i. t. 5, f. 1.

Monoculus nasutus? Jurine, Mon. t. 13, f. 1. Daphnia congener, Koch, Deuts. Crust. p. 35, t. 13.

Danhnia exceptages Kach I e t 11

Daphnia exspinosa, Koch, l. c. t. 11.

Monoculus simus, Jurine, Mon. p. 129, t. 12, f. 1, 2.

a-f. Near London. Presented by Dr. Baird, F.L.S. Belfast.

### 5. DAPHNIA RETICULATA .Netted Water-flea.

Daphnia reticulata, Desm. Cons. p. 374; Baird, Proc. Berw. Nat. Club, ii. p. 148; Brit. Ent. p. 97, t. 7, f. 5, t. 12, f. 1, 2; M. Edw. Crust. iii. p. 381.

Monoculus reticulatus, Jurine, Hist. p. 139, t. 14, f. 3, 4.

Daphnia quadrangula, Müller. Ent. p. 90, t. 13, f. 4. Monoculus quadrangularis, Manuel, Enc. Meth. vii. t. 265, f. 8, 9.

Near Berwick and London (Dr. Baird).

# 6. DAPHNIA BOTUNDA. Strauss' Water-flea.

Daphnia rotanda, Strauss, Mem. Mus. v. t. 29, f. 27, 28; Baird. Proc. Berw. N. Club, ii. p. 148; Brit. Ent. p. 98, t. 10, f. 4, t. 9, f. 6, jun.

Daphma rotundata, M. Edw. Crust. iii. p. 381.

Daphnia reticulata, Baird, Ann. & Mag. N. Hist. i. p. 257, L 9. f. 14.

Daphnia quadrangula, Koch, Deuts. Crust. p. 35, t. 19? Daphnia mucronata, Koch, l. c. t. 20?

Daphnia angulosa, Koch, l. c. t. 22, young?

a. Near London. Presented by Dr. Buird, F.L.S.

### 7. DAPHNIA MUCRONATA. Pointed Water-flea.

Daphnia mucronata, Müller, Ent. 94, t. 13, f. 5, 6; M. Edw. Crust. iii. 382; Baird, Proc. Berw. Nat. Club, ii. p. 148; Brit. Ent. p. p. 99, t. 10, f. 2, 3.

Monoculus bispinosus, Degeer, Mem. vii. t. 28, f. 3—8.

Monoculus mucronatus, Jurine, Hist. t. 14, f. 1, 2.

Daphnia bispinosus, Koch, Deuts. F. Crust. p. 8, t. 1.

Daphnia mucronata, var. acute-rostrata, Baird, Brit. Ent. t. 10, f. 3.

Daphnia mucronata, var. obtuse-rostrata, Baird, Brit. Ent. t. 10, f. 2.

a—k. Near London. (Isleworth, &c.) Presented by Dr. Baird.

### 2. MOINA.

Daphnia, Müller. Monoculus, Fabr. Pasithea, Koch (not Kroyer). Moina, Baird, Brit. Ent. (1850).

# 1. Moina rectibostris. Straight-beaked Water-flea.

Daphnia rectirostris, Müller, Ent. t. 12, f. 1, 2.

Monoculus rectirostris, Fabr. Ent. Syst. ii. 493; Jurine, Mon. t. 13, f. 3, 4.

Pasithea rectirostris, Koch, Deuts. Crust. p. 35, t. 24.

Pasithea gibba, Koch, l. c. p. 36, t. 16?

Daphnia macrocopus, Strauss, Mem. Mus. v. t. 29, f. 30.

Moina rectirostris, Baird, Brit. Ent. p. 101, t. 11, f. 1, 2.

Blackheath, Kent.

# 2. Moina Brachiata. Armed Water-flea.

Daphnia brachiata, Desm. Cons. 373; M. Edw. Crust. iii. 383; Baird, Zoologist, 1843, p. 193; Proc. Berwicksh. N. Club, ii. 148.

Monoculus brachiatus, Jurine, Hist. p. 131, t. 12, f. 3, 4. Moina brachiata, Baird, Brit. Ent. p. 102, t. 9, f. 1, 2.

a—g. Near London (Blackheath and Old St. Pancras Road). Presented by Dr. Baird, F.L.S.

### 3. MACROTHRIX.

Daphnia, Müller.
Lynoeus, Desm. Cons.
Monoculus, Jurine, Mon.
Macrothrix, Baird, Ann. & Mag. Nat. Hist. xi. p. 87 (1843).
Acanthocercus, Schædler, Erichs. Arch. (1846).

1. MACROTHRIX LATICORNIS. Broad-horned Water-flea.

Macrothrix laticornis, Baird, Ann. & Mag. Nat. Hist. xi. p. 87, t. 2, f. 9, 10; Brit. Ent. p. 103, t. 15, f. 2.

Monoculus laticornis, Jurine, Mon. p. 151, t. 15, f. 6, 7.

Daphnia curvirostris, Müller, Ent. p. 93? t. 13, f. 1, 2?

Acanthocercus curvirostris, Schædler, Erichs. Arch. 1846.

a—d. Near London, Southall, Highgate. Presented by Dr. Baird. Ireland, Belfast.

### 2. MACROTHRIX ROSEUS. Pink Water-ffea.

Monoculus roseus, Jurine, Hist. p. 150, t. 15, f. 4, 5.
Daphnia rosea, M. Edw. Crust. iii. 384; Yarrell, Brit. Fishes, ii. p. 93 (vignette).
Macrothrix roseus, Baird, Brit. Ent. p. 104; Berw. Nat. Club, ii. p. 149.
Lochmaben (Sir Wm. Jardine).

#### 4. BOSMINA.

Monoculus, Jurine. Lynceus, Müller. Daphnia, M. Edw. Bosmina, Baird, Berw. Nat. Club. (1845). Eunica, Koch, Deuts. Crust.

# 1. Bosmina Longirostris. Long-beaked Water-flea.

Bosmina longirostris, Baird, Ann. & Mag. N. Hist. xvii. p. 412, t. 9 B, f. 1; Brit. Ent. p. 105, t. 15, f. 3.

Lynceus longirostris, Müller, Ent. p. 76, t. 10, f. 7, 8.

Monoculus cornutus, Jurine, Hist. p. 142, t. 14, f. 8—10.

Daphnia cornuta, Baird, Ann. Nat. Hist. i. 256, t. 9, f. 15; M. Edw. Crust. iii. p. 382.

Bosmina cornuta, Baird, Proc. Berw. N. Club, ii. p. 149.

Eunica longirostris, Koch, Deuts. Crust. p. 35, t. 23.

Food of Vendace (Lochmaben), Knox, Edin. Roy. Soc. Trans. xii. pt. 2, t. 11, f. 3 and 5 (1834).

a—g. Near London (New River and Highgate Ponds). Presented by Dr. Baird. Lochmaben.

### FAM. II. SIDIDÆ.

Sidina, Baird, Brit. Ent. p. 106.

#### 1. SIDA.

Daphnia, Müller. Monoculns, Degeer. Sida, Strauss, Mem. Mus. d'Hist. Nat. v. (1821).

#### 1. SIDA CRYSTALLINA.

Sida crystallina, Strauss, Mem. Mus. v.; M. Edw. Crust. iii. p. 385; Baird, Proc. Berw. Nat. Club, ii. p. 148; Brit. Ent. p. 107, t. 12, f. 3, 4, t. 13, f. 1—4.

Daphnia crystallina, Müller, Entom. p. 96, t. 14, f. 1—4.

Monoculus elongatus, Degeer, Ins. vii. t. 29, f. 1 h.

a-g. Overstone Park, Northamptonshire. Presented by Dr. Baird, F.L.S.

Near London (Isleworth), Dr. Baird. Ireland (near Dublin), W. Thompson, Esq.

### 2. DAPHNIDELLA.

Daphnella, Baird (olim), Brit. Ent. p. 109, t. 14, f. 1—4 (not Hinds.)
Daphnidella, Baird, MSS.

# 1. DAPHNIDELLA WINGII. Wing's Water-flea.

Daphnidella Wingii, Baird, Brit. Ent. p. 109, t. 14, f. 1—4. Middlesex.
Surrey (near Richmond).

# FAM. III. POLYPHEMIDÆ.

Cephalota (p.) Latr. Gen. Crust. et Ins. i. p. 20. Polyphemidæ, Baird, Trans. Berw. Nat. Club. (1845); Dana, Proc. Amer. Acad. Art. & Sci. (1849).

### 1. POLYPHEMUS.

Monoculus, Linn.
Polyphemus, Müller, Ent.
Cephaloculus, Lam. Syst. An. s. Vert. p. 170 (1801).
Scaligerus, Koch, Deuts. Crust.

# 1. POLYPHEMUS PEDICULUS. Fresh-water All-eye.

Polyphemus pediculus, Strauss, Mem. Mus. v.; M. Edw. Crust. iii. p. 389; Baird, Brit. Ent. p. 111, t. 17, f. 1.

Monocle, &c., Geoffr. Ins. ii. p. 656.

Monoculus Pediculus, Linn. Faun. Suec. p. 2048; Syst. Nat. p. 1058; Sulzer, Insect. t. 30, f. 8 a.

Monoculus pediculus ramosus, Degeer, Mem. vii. p. 467, t. 28, f.

9-13.

Polyphemus stagnorum, Latr. Cuv. R. A. iv. p. 163; Leach, Dict. Sc. Nat. xiv. p. 540; Desm. Cons. t. 54, f. 1.

Monoculus Polyphemus, Jurine, Hist. p. 143, t. 15, f. 1-3.

Polyphemus oculus, Müller, Entom. p. 119, t. 20, f. 1-5; Leach, Sam. Ent. U. Comp. p. 81; Baird, Trans. Berw. N. Club, il. p. 149.

Cephaloculus stagnorum, Lam. Syst. An. s. Vert. p. 170; Hist. An. s. Vert. v. p. 131.

s. vert. v. p. 131.

Scalicerus pediculus, Koch, Deutsch. Cr. h. 37, t. 2, a, b. Near London (Richmond). Presented by Dr. Baird, F.L.S.

### 2. EVADNE.

Evadne, Loven, Zool. Bidr.

### 1. EVADNE NORDMANNI.

Evadne Nordmanni, Loven, Zool. Bidr. t. 1, 2; K. V. Acad. Hand. t. 1, f. 1—8; M. Edw. Crust. iii. 390, t. 36, f. 7; Goodsir, Edin. New Phil. Journ. xxxiii. t. 6, f. 15, 16; Baird, Proc. Berw. N. H. Club, ii. p. 150; Brit. Entom. p. 114, t. 17. f. 2.

a. Firth of Forth. Presented by H. Goodsir, Esq., Surg. R.N.

### FAM. IV. LYNCEIDÆ.

Lynceidæ, Baird, Brit. Ent. p. 115. Lynceus, Müller. Daphnides, pt. Strauss. Daphnidiens, pt. M. Edw. Daphnidæ, pt. Baird, Ann. & Mag. N. Hist.

### 1. EURYCERCUS.

Eurycercus, Baird, Ann. & Mag. N. Hist. ii. p. 88; Brit. Entom. p. 123. Lynceus, Müller, sp.

### 1. EURYCERCUS LAMELLATUS. Flat-tailed Water-flea.

Eurycercus lamellatus, Baird, Ann. & Mag. Nat. Hist. xi. 88, pl. 2, f. 1—8; Proc. Berw. N. H. Club, ii. p. 150; Brit. Ent. p. 124, t. 15, f. 1—1 a, l.

Lynceus lamellatus, Müller, Zool. Dan. Prodr. p. 3396; Entomostr. p. 73, t. 9, f. 4—6; M. Edw. Crust. iii. p. 388; Koch, Deutsch. Crust. p. 36, t. 9.

a—f. Isleworth, &c., near London. Presented by Dr. Baird, F.L.S. Yetholm (Roxburghshire).

### 2. CHYDORUS.

Chydorus, Leach, Enc. Brit. Suppl.; Baird, Brit. Ent. p. 125. Lynceus, Müller, sp.

# 1. CHYDORUS SPHERICUS. Spherical Water-flea.

Chydorus sphæricus, Baird, Ann. & Mag. N. Hist. xi. p. 89, t. 2, f. 11-13; Proc. Berw. Nat. Club, ii. p. 150; Brit. Ent. p. 126, t. 16, f. 8.

Lynceus sphæricus, Müller, Ent. p. 71, t. 9, f. 7-9; M. Edw. Crust. iii. p. 386; Pritchard, Microsc. Cab. t. 8, f. 3; Koch, Deutsch.

Crust. p. 36, t. 13.

Monoculus infusorius, Schrank, En. Ins. Austr. p. 536; Eickhorn, Beytr. Nat. t. 3, f. d*; (C. Eickhorni, Baird, l. c. p. 126, note?) Monoculus sphæricus, Jurine, Hist. p. 157, t. 16, f. 3. Chydorus Mulleri, Leach, Enc. Brit. Suppl.; Dict. Sc. Nat. xiv.

p. 541.

a-m. Near London, &c.; ponds and ditches.

### 2. Chyporus globosus. Globular Water-flea.

Chydorus globosus, Baird, Ann. & Mag. N. Hist. xi. p. 90, t. 3, f. 1—4; Proc. Berw. N. Club, ii. p. 150; Brit. Entom. p. 127, t. 16, f. 7.

Near Richmond and Isleworth. Regent's Park.

# 3. CAMPTOCERCUS.

Camptocercus, Baird, Ann. & Mag. N. Hist. xi. p. 91; Brit. Entom. p. 128.
Lynceus, Müller.

# 1. CAMPTOCERCUS MACROURUS. Long-tailed Water-flen.

Camptocercus macrourus, Baird, Ann. & Mag. N. Hist. xi. p. 91, t. 3, f. 5, 6; Proc. Berw. N. Club, ii. p. 150; Brit. Entom. p. 128, t. 16, f. 9.

Lynceus macrourus, Müller, Ent. p. 77, t. 10, f. 1—4; M. Edw. Crust. iii. p. 388.

a-k. Highgate, Richmond, near London. Presented by Dr. Baird, F.L.S.

#### 4. ACROPERUS.

Actoperus, Baird, Ann. & Mag. N. Hist. xi.; Brit. Entom. p. 129. Lynceus, pt., Baird, Proc. Berw. Nat. Club, i.

# ACROPERUS HARPÆ. Harp-shaped Water-flea.

Acroperus harpæ, Baird, Ann. & Mag. N. Hist. xi. p. 91, t. 3, f. 7; Proc. Berw. Nat. Club, ii. p. 151; Brit. Entom. p. 129, t. 16, f. 5. Lynceus harpæ, Baird. Proc. Berw. N. Club, i. p. 100, t. 2, f. 17. Lynceus leucocephalus, Koch, Deutsch. Crust. p. 36, t. 10. a-e. Near Richmond. Presented by Dr. Baird. Osterly Park. Yetholm.

# 2. Acroperus nanus. Dwarf-harp Water-flea.

Dunglass.

Acroperus nanus, Baird, Ann. & Mag. N. Hist. xi. p. 92, t. 3, f. 8; Proc. Berw. Nat. Club, ii. p. 151; Brit. Entom. p. 130, t. 16, f. 6. Norwood and Southall, near London.

### 5. ALONA.

Alona, Baird, Ann. & Mag. Nat. Hist. xi.; Brit. Ent. p. 131. Lynceus, Müller, sp.

# 1. Alona quadrangularis. Square Water-flea.

Alona quadrangularis, Baird, Ann. & Mag. Nat. Hist. xi. p. 92, t. 3, f. 9—11; Proc. Berw. Nat. Club, ii. p. 151; Brit. Entom. p. 131, t. 46, f. 4.

Lynceus quadrangularis, Müller, Ent. p. 72, t. 9, f. 1-3; M. Edw. Crust. iii. p. 388; Koch, Deutsch. Crust. f. 36, t. 15,

Monoculus striatus, Jurine, Hist. t. 16, f. 1, 2? Monoculus quadrangulus, Gmel. S. N. p. 3008.

Near Richmond, Peaseburn, Berwickshire, and near Yetholm.

2. Alona reticulata. Netted-square Water-flea.

Alona reticulata, Baird, Ann. & Mag. Nat. Hist. xi. p. 93, t. 3, f. 12; Proc. Berw. Nat. Club, ii. p. 151; Brit. Entom. p. 132, t. 16, f. 3.

Near Southall.

3. Alona ovata. Egg-shaped Water-flea.

Alona ovata, Baird, Brit. Ent. p. 133, t. 16, f. 2. Blackheath.

### 6. PLEUROXUS.

Pleuroxus, Baird, Ann. & Mag. Nat. Hist. xi. Lynceus, Müller, sp.

1. PLEUROXUS TRIGONELLUS. Three-cornered Water-flea.

Pleuroxus trigonellus, Baird, Ann. & Mag. Nat. Hist. xi. p. 93, t. 3, f. 13; Trans. Berw. Nat. Club, ii. p. 151; Brit. Ent. p. 134. t. 17, f. 3.

Lynceus trigonellus, Müller, Ent. p. 74, t. 10, f. 5, 6; M. Edw. Crust, iii. p. 387; Koch, Deutsch. Crust. p. 36, t. 14.

a-d. Hanwell (Middlesex). Presented by Dr. Baird. Near London (Copenhagen Fields). Berwickshire and Yetholm.

2. PLEUROXUS UNCINATUS. Hook-beaked Water-flea.

Pleuroxus uncinatus, Baird, Brit. Ent. p. 135, t. 17, f. 4.

- a. Middlesex (Hanwell).
  - 3. Pleuroxus hamatus. Hook-armed Water-flea.

Pleuroxus hamatus, Baird, Ann. & Mag. Nat. Hist. xi. p. 94, t. 3. f. 14; Trans. Berw. Nat. Club. ii. p. 151; Brit. Ent. p. 136, t. 17, f. 5.

Lynceus hamatus, Baird, Proc. Berw. Nat. Club, i. 100, t. 2, f. 18. Yetholm.

### 7. PERACANTHA.

Peracantha, Baird, Ann. & Mag. Nat. Hist. xi.; Brit. Ent. p. 136. Lynceus, Müller, sp.

### 1. PERACANTHA TRUNCATA. Blunt Water-flea.

- Peracantha truncata, Baird, Ann. & Mag. Nat. Hist. xi. p. 94, t. 3, f. 15; Proc. Berw. Nat. Club. ii. p. 151; Brit. Ent. p. 137, t. 16, f. 1.
- Lynceus truncatus, Müller, Ent. p. 75, t. 11, f. 4-6; M. Edw. Crust. iii. p. 388; Koch. Deutsch. Crust. p. 36, t. 11.
- a—e. Near London (Copenhagen Fields, Richmond, &c.). Presented by Dr. Baird.
  Near Yetholm.

### LEGION II. LOPHYROPODA.

Lophyropoda, Leach, Dict. Sc. Nat. xiv. p. 524; Baird, Brit. Ent. p. 138.
Lophyropa, Latr. R. A. iv. p. 150.
Lophyropa, pt. Desm. Cons.
Ostrapoda, Desm. Cons.
Branchiopodes frangés, pt. Lam. Hist. An. sans Vert. v.
Aspidostraca, pt. Burm. Organ. der Tril. t. p. 38 (1843).

# ORDER I. OSTRACODA.

Ostracoda, Latr. Hist. Nat. Crust.; Baird, Brit. Ent. p. 138. Ostracoda, II., Latr. Fam. Nat. p. 300. Bitestacés ou Ostracins, pt. Dumeril, Zool. Anal. p. 177 (1806). Ostrapoda, Strauss, Mem. Mus. d'Hist. Nat. Cyproides, M. Edw. Crust. iii. p. 393. Ostracodes, M. Edw. Crust. iii. p. 393. Lophyropoda ostracoda, Burm. Organ. der Tril. p. 38 (1843). Cypridacea, Dana, Proc. Am. Acad. Sc. 1849. Monophthalma, pt. Latr. Gen. Crust. et Ins. i. p. 17.

# FAM. I. CYPRIDÆ.

Cypridæ, Baird, Brit. Ent. p. 139. Cyproides, pt. M. Edw. Crust. iii. p. 393. Cypris, sp. Müller.

### 1. CYPRIS.

Cypris, Müller.
Monoculus, Linn.
Monocles à coquille bivalve, Jurine.
Monoculus conchaceus, Linn.

### 1. Cypris Tristriata. Three-streaked Water-flea.

Cypris tristriata, Baird, Trans. Berw. Nat. Club, i. p. 99, t. 3, f. 13, ii. p. 152; Brit. Ent. p. 152, t. 18, f. 1—1, a i, 2, 3. Cypris virens, Desm. Cons. p. 384?; M. Edw. Crust. iii. p. 398. Monoculus virens, Jurine, Mon. p. 174, t. 18, f. 15, 16? Cypris pubera, Baird, Mag. Zool. & Bot. ii. p. 524, t. 9, f. 1—13. a—c. Finchley Common. From the collection of Dr. Leach. d—r. Near London (Highgate). Presented by Dr. Baird.

### 2. CYPRIS VIDUA. Widow Water-flea.

Cypris vidua, Müller, Ent. p. 55, t. 4, f. 7, 9; Desm. Cons. p. 385, t. 55, f. 4; Baird, Mag. Zool. & Bot. ii. p. 133, t. 5, f. 1; M. Edw. Crust. iii. p. 399; Baird, Brit. Ent. p. 152, t. 19, f. 10, 11. Monoculus viduus, Jurine, p. 175, t. 19, f. 5, 6. Monoculus viduatus, Fabr. Ent. Syst. ii. p. 496.

a—e. Near London (Blackheath, &c.). Presented by Dr. Baird.
 f—z. Southall (Middlesex). Presented by Dr. Baird.
 Warwick (Rugby).

### 3. CYPRIS MONACHA. Monk Water-flea.

Cypris monacha, Müller, Ent. p. 60, t. 5, f. 6—8; Desm. Cons. t. 55, f. 7; Baird, Mag. Zool. & Bot. ii. p. 133, t. 5, f. 2.; M. Edw. Crust. iii. p. 397; Koch, Deutsch. Crust. p. 2, t. 1; Baird, Brit. Ent. p. 153, t. 18, f. 6.

Monoculus monacha, Jurine, Mon. p. 173, t. 18, f. 13, 14. Cypris nubilosa, Koch, Deutsch. Crust. p. 12, t. 4.

a-z. Near London (Southall) and at Windsor. Presented by Dr. Baird.

Warwickshire (Old Canal near Rugby). Northumberland (Newham Loch).

Berwickshire.

### 3. Cypris fusca. Brown Water-shell-flea.

Cypris fusca, Strauss-Durck. Mem. Mus. vii. t. 4, f. 1—15; Desm. Cons. p. 384, t. 55, f. 1; Baird, Mag. Zool. & Bot. ii. p. 134, t. 5, f. 4; Trans. Berw. Nat. Club, ii. p. 152; Guerin, Icon. t. 32, f. 4; M. Edw. Crust. iii. p. 401, t. 36, f. 3; Baird, Brit. Ent. p. 154, t. 19, f. 7.

a-c. Near London. Presented by Dr. Baird.

# 5. Cypris compressa. Compressed Water-shell-flea.

Cypris compressa, Baird, Proc. Berw. Nat. Clab, p. 100, t. 3, f. 16; Mag. Zool. & Bot. ii. p. 136, t. 5, f. 7; M. Edw. Crust. iii. p. 400; Baird, Brit. Ent. p. 154, t. 19, f. 14. Cypris punctata, Koch, Deutsch. Crust. p. 21, t. 23. Cypris tenera, Koch, Deutsch. Crust. p. 12, t. 3. a—p. Near London (Highgate). Presented by Dr. Baird. Warwick (Rugby).

Roxburghshire (Yetholm).

### 6. CYPRIS MINUTA. Minute Water-shell-flea.

Cypris minuta, Baird, Proc. Berw. Nat. Club, i. p. 99, t. 3, f. 9; Mag. Zool. & Bot. ii. t. 5, f. 11; Trans. Berw. Nat. Club, ii. p. 152; Brit. Ent. p. 155, t. 18, f. 7, 8; M. Edw. Crust. iii. p. 403.

Monoculus ovum, Jurine, p. 179, t. 19, f. 18, 19?

a—z. Near London (Copenhagen Fields). Presented by Dr. Baird.
Roxburghshire (Yetholm).

# 7. Cypris Joanna. Joanna's Cypris.

Cypris Joanna, Baird, Proc. Berw. Nat. Club, i. p. 99, t. 3, f. 8, ii. p. 152; Mag. Zool. & Bot. ii. p. 136, t. 5, f. 12; Brit. Ent. p. 155, t. 18, f. 5; M. Edw. Crust. iii. p. 403.

Abbey, St. Bathan's (Berwickshire).

# 8. CYPRIS ELONGATA. Long Water-shell-flea.

Cypris elongata, Baird, Trans. Berw. Nat. Club, i. p. 99, t. 3, f. 10; Mag. Zool. & Bot. ii. p. 137, t. 5, f. 13; Brit. Ent. p. 156, t. 19, f. 6; M. Edw. Crust. iii. p. 404.

Roxburghshire (Yetholm).

# 9. Cypris Westwoodii. Westwood's Cypris.

Cypris Westwoodii, Baird, Trans. Berw. Nat. Club, i. p. 99, t. 3, f. 12; Mag. Zool. & Bot. ii. p. 137, t. 5, f. 14; Brit. Ent. p. 156, t. 19, f. 9; M. Edw. Crust. iii. p. 400.

Roxburghshire (Yetholm).

# 10. CYPRIS GIBBOSA. Gibbous Cypris.

Cypris gibbosa, Baird, Mag. Zool. & Bot. ii. p. 137, t. 5, f. 15; Brit. Ent. p. 156, t. 19, f. 8; M. Edw. Crust. iii. p. 401.

Near London (Surrey Zoological Gardens).

### 11. CYPRIS CLAVATA. Club-shaped Cypris.

Cypris clavata, Baird, Mag. Zool. & Bot. ii. p. 137, t. 5, f. 16; Brit. Ent. p. 157, t. 18, f. 4; M. Edw. Crust. iii. p. 405. Near London (Copenhagen Fields).

### 12. CYPRIS STRIGATA. Strigate Cypris.

Cypris strigata, Müller, Ent. p. 54, t. 4, f. 4—6; Ramdohr, Beytr. t. 4, f. 1—14; Baird, Proc. Berw. Nat. Club, ii. p. 152; Brit. Ent. p. 157.

Monoculus bistrigatus, Jurine, Hist. p. 177, t. 19, f. 12, 13.
Cypris bistrigata, M. Edw. Crust. ii. p. 403.
East Lothian (Thornton Loch).

# 13. CYPRIS ELLIPTICA. Elliptical Cypris.

Cypris elliptica, Baird, Ann. & Mag. Nat. Hist. xvii. p. 414, t. 9, f. 2; Proc. Berw. Nat. Club, ii. p. 152; Brit. Ent. p. 158, t. 19, f. 12.

a-n. Highgate. Presented by Dr. Baird.

# 14. Cypris sella. Saddle-marked Cypris.

Cypris sella, Baird, Ann. & Mag. Nat. Hist. xvii. p. 414, t. 9, f. 3;

Proc. Berw. Nat. Club, ii. p. 152; Brit. Ent. p. 158, t. 19, f. 5.

a-x. Clapham Common. Presented by Dr. Baird.

# 15. CYPRIS AURANTIA. Orange Water-flea.

Cypris aurantia, Desm. Cons. p. 384; M. Edw. Crust. iii. p. 402; Baird, Brit. Ent. p. 159, t. 19, f. 13.

Monochus aurantius, Jurine, Mon. p. 173, t. 18, f. 5—12.

Windsor and Dover.

a-z. Blackheath and Bexley, Kent. Presented by Dr. Baird.

### 16. CYPRIS GIBBA. Swollen Water-flea.

Cypris gibba, Ramdohr, Mag. Ges. Naturf. Berl. t. 3, f. 13-17. Cypris biplicata, Koch, Deutsch. Crust. p. 21, t. 16.

a, b. Ornamental Water (Regent's Park). Presented by T. Rupert Jones, Esq.
 Charing, Kent. (T. Rupert Jones, Esq.)

# Charing, Kent. (1. Kupert Jones, Esq.)

#### 2. CANDONA.

Candona, Baird, Brit. Ent. p. 159. Cypris, Müller.

# 1. Candona Lucens. Shining Water-flea.

Candona lucens, Baird, Brit. Ent. p. 160, t. 19, f. 1.

Cypris lucens, Baird, Proc. Berw. Nat. Club. i. p. 100, t. 3, f. 15. Cypris candida, Baird, Mag. Zool. & Bot. ii. p. 134, t. 5, f. 3 (not C. candida, Müller).

Candona candida, Baird, Proc. Berw. Nat. Club, ii. p. 153.

Cypris pellucida, Koch, Deutsch. Crust. ii. t. 5.

Cypris lucida, Koch, Deutsch. Crust. p. 21, t. 18.

Berwickshire and Roxburghshire.

a-g. Southall (Middlesex). Presented by Dr. Baird.

# 2. Candona reptans. Creeping Water-flea.

Candona reptans, Baird, Proc. Berw. Nat. Club, ii. p. 153; Brit. Ent. p. 160, t. 19, f. 3.

Cypris reptans, Baird, Proc. Berw. Nat. Club, i. p. 99, t. 3, f. 11; Mag. Zool. & Bot. ii. p. 135, t. 5, f. 5; M. Edw. Crust. iii. p. 400.

a—k. Near London. Presented by Dr. Baird. l. Cornwall (Penzance). Presented by R. Couch, Esq. Roxburghshire (Yetholm).

Northumberland (Newham Loch).

Berwickshire (Cocksburnpath).

# 3. CANDONA HISPIDA. Rough Water-flea.

Candona hispida, Baird, Proc. Berw. Nat. Club, ii. p. 153; Brit. Ent. p. 161, t. 19, f. 4.

Cypris hispida, Baird, Proc. Berw. Nat. Club, i. p. 99, t. 3, f. 14; Mag. Zool. & Bot. ii. p. 135, t. 5, f. 6; M. Edw. Crust. iii. p. 405.

Roxburghshire (Yetholm). Surrey (near the Zoological Gardens).

4. CANDONA DETECTA. Smooth White-shell-flea.

Candona detecta, Baird, Trans. Berw. Nat. Club, ii. p. 153; Brit. Ent. p. 161.

Cypris detecta, Müller, Ent. p. 49, t. 3, f. 1—3.

Smooth White Insect, Müller, Phil. Trans. p. 61, 230, t. 7, f. 1-3.

Yetholm.

a, b. Southall (Middlesex). Presented by Dr. Baird.

5. CANDONA SIMILIS. Similar Water-flea.

Candona similis, *Baird*, *Ann. & Mag. Nat. Hist.* xvii. p. 415, t. 9, f. 4; *Trans. Berw. Nat. Club*, ii. p. 153; *Brit. Ent.* p. 162, t. 19, f. 2.

Clapham Common.

6. CANDONA TOROSA. Torose Water-flea.

Candona torosa, Jones, Ann. & Mag. Nat. Hist. a—c. Gravesend Ditches. Presented by T. Rupert Jones, Esq.

# FAM. II. CYTHERIDÆ.

Cytheridæ, Baird. Cytherinen, Ræm. Jahrb. 1838.

#### 1. CYTHERE.

Cythere, Müller. Cytherina, Lam. Cypridina, Bosc. Bairdia, M'Coy, Ann. & Mag. Nat. Hist.

### 1. CYTHERE FLAVIDA. Yellowish Sea-shell-flea.

- Cythere flavida, Müller, Ent. p. 66, t. 7, f. 5, 6; Baird, Mag. Zool. and Bot. ii. p. 142; Brit. Ent. p. 168, t. 21, f. 12, 12a; M. Edw. Crust. iii. p. 407.
- a—c. Poole Bay, Dorset. Presented by T. Rupert Jones, Esq. Berwickshire (Sea-shore).
  - 2. CYTHERE RENIFORMIS. Kidney-shaped Sea-shell-flea.
- Cythere reniformis, Baird, Trans. Berw. Nat. Club, i. p. 98, t. 3, f. 5; Mag. Zool. & Bot. ii. p. 142, t. 5, f. 16—22; Brit. Ent. p. 169, t. 20, f. 5, 5 af; M. Edw. Crust. iii. p. 408.
- a-d. Berwick Bay (pools on the rocks). Presented by Dr. Baird. e-n. Foreland, near Dover. Presented by Dr. Baird.
  - 3. CYTHERE ALBO-MACULATA. White-spotted Sea-shell-flea.

Cythere albo-maculata, Baird, Mag. Zool. & Bot. ii. p. 142, t. 5, f. 23; Trans. Berw. Nat. Club, ii. p. 153; Brit. Ent. p. 169, t. 20, f. 7; M. Edw. Crust. iii. p. 408.

Berwick Bay.

a, b. Dover. Presented by Dr. Baird.

c. Poole Bay, Dorset. Presented by T. Rupert Jones, Esq.

# 4. CYTHERE ALBA. White Sea-shell-flea.

Cythere alba, Baird, Trans. Berw. Nat. Club, i. p. 98, t. 3, f. 6;
Mag. Zool. & Bot. ii. p. 143, t. 5, f. 24;
Brit. Ent. p. 170, t. 20, f. 6;
M. Edw. Crust. iii. p. 409.

East Lothian (Dunbar).

# 5. CYTHERE VARIABILIS. Variable Sea-shell-flea.

Cythere variabilis, Baird, Proc. Berw. Nat. Club, i. p. 98, t. 3, f. 7; Mag. Zool. & Bot. ii. p. 143, t. 5, f. 25; Brit. Ent. p. 170, t. 21, f. 10, 11; M. Edw. Crust. iii. p. 409.

Berwickshire Coast.

a-d. Dover. Presented by Dr. Baird.

e-h. Poole Harbour. Presented by T. Rupert Jones, Esq.

# 6. CYTHERE AURANTIA. Orange Sea-shell-flea.

Cythere aurantia, Baird, Mag. Zool. & Bot. ii. p. 143, t. 5, f. 26; Brit. Ent. p. 171, t. 21, f. 8; M. Edw. Crust. iii. p. 408.

a—d. Poole Harbour (Dorset). Presented by T. Rupert Jones, Esq.

Berwick Bay. (Dr. Baird).

### 7. CYTHERE NIGRESCENS. Blackish Sea-shell-flea.

Cythere nigrescens, Baird, Mag. Zool. & Bot. ii. p. 143, t. 5, f. 27; Brit. Ent. p. 171, t. 21, f. 4, 4 a; M. Edw. Crust. iii. p. 409.

Berwick Bay.

a—c. Dover. Presented by Dr. Baird.

### 8. CYTHERE MINNA. Minna Sea-shell-flea.

Cythere Minna, Baird, Brit. Ent. p. 171, t. 20, f. 4, 4 a—d. Bairdia siliqua, var. c.? Jones, Ent. Cret. Forn. Engl. Deep water. (R. M'Andrew, Esq.)
a. Shetland. Presented by Dr. Baird.

# 9. CYTHERE INOPINATA. Fresh-water Shell-flea.

Cythere inopinata, Baird, Zoologist, 1843, p. 195, f. a—e; Trans. Berw. Nat. Club, ii. p. 153; Brit. Ent. p. 172, t. 20, f. 1, 1 a e. Middlesex (Pond between Hanwell and Southall).

### 10. CYTHERE ANGUSTATA. Narrow Sea-shell-flea.

Cythere angustata, Baird, Brit. Ent. p. 172, t. 21, f. 6. Cytherina angustata, Munster, Jahrb. f. Miner. 1838, t. 6, f. 10. Devonshire.

a—d. Tenby. Presented by Dr. Baird.

e-f. Poole Bay (Dorset). Presented by T. Rupert Jones, Esq.

# 11. CYTHERE ACUTA. Sharp Sea-shell-flea.

Cythere acuta, Baird, Brit. Ent. p. 173, t. 21, f. 5. Arran (in sand).

- 12. CYTHERE PELLUCIDA. Clear Sea-shell-flea. Cythere pellucida, *Baird*, *Brit*. *Ent*. p. 173, t. 21, f. 7. Boston (in sand).
- 13. CYTHERE IMPRESSA. Impressed Sea-shell-flea. Cythere impressa, *Baird*, *Brit*. *Ent.* p. 173, t. 21, f. 9. a-d. Arran (in sand). Presented by T. Rupert Jones, Esq. Torquay (in sand).
- 14. CYTHERE QUADRIDENTATA. 4-toothed Sea-shell-flea. Cythere quadridentata, *Baird*, *Brit. Ent.* p. 173, t. 21, f. 2. a, b. Dogger Bank. Presented by T. Rupert Jones, Esq. In sand. From Boston, Torquay, and Arran.
- 15. CYTHERE CONVEXA. Convex Sea-shell-flea. Cythere convexa, Baird, Brit. Ent. p. 174, t. 21, f. 3. a—c. Tenby (in sand). Presented by Dr. Baird. d—g. Arran (in sand). Presented by T. Rupert Jones, Esq. Torquay.
- 16. CYTHERE VIRIDIS. Green Sea-shell-flea. Cythere viridis, *Leach*, *Sam. Ent. U. Comp.* p. 81. Scotland (Shores amongst Fuci and Confervæ).
- 17. CYTHERE SUBDELTOIDEA. 3-Cornered Sea-shell-flea. Bairdia subdeltoidea, T. Rupert Jones, Cret. Ent. t. f. Cytherina subdeltoidea, Munster, Ræmer, Jahrb. t. f. a. Arran (var.), recent. Presented by T. Rupert Jones, Esq.

### 2. CYTHEREIS.

Cythereis, Jones, Ent. Cret. Form. 1849. Cythere, Munster, Jahrb. f. Miner. sp. Cytherina. Ræmer, sp. Cypridina, Bosquet, Mem. Lege. 1847, sp.

- 1. Cythereis Whiteii, White's Sea-shell-flea.

  Cythereis Whiteii, Baird, Brit. Ent. p. 175, t. 20, f. 3, 3 a.

  a—d. Tenby and Poole Bay. Presented by T. Rupert Jones, Esq. Torquay (in sand).
- CYTHEREIS JONESII. Jones's Sea-shell-flea.
   Cythereis Jonesii, Baird, Brit. Ent. p. 175, t. 20, f. 1.
   Isle of Skye (in sand).
- 3. CYTHEREIS ANTIQUATA. Rubbed Sea-shell-flea. Cythereis antiquata, *Baird*, *Brit*. *Ent.* p. 176, t. 20, f. 2. Isle of Skye (in sand).
- 4. CYTHEREIS FIMBRIATA. Fringed Sea-shell-flea. Cytherina fimbriata, *Ræmer*, *Jahrb*. (fid. *Jones*).

  a. Arran (recent). Presented by T. Rupert Jones, Esq.

# FAM. III. CYPRIDINADÆ.

Cypridinadæ, Baird, l. c. infr.

### 1. CYPRIDINA.

Cypridina, M. Edw. Crust. iii. p. 409. Cyprella Bosquet. Asterope, Philippi, Wiegm. Arch.

1. CYPRIDINA MACANDREI. M'Andrew's Deep Sea-shell-flea.

Cypridina Macandrei, Baird, Ann. & Mag. Nat. Hist. n. s. i. p. 21, t. 6 B, f. 1-7; Brit. Ent. p. 179, t. 22, f. 1 a-g.

a—c. Between Lewis and Skye, deep water. (R. M'Andrew, Esq.) Presented by Dr. Baird, F.L.S. 2. CYPRIDINA BRENDA. Shetland Deep Sea-shell-flea. Cypridina Brenda, Baird, Brit. Ent. p. 181, t. 23, f. 1 a—g. a—c. Shetland (deep water). Presented by Dr. Baird.

### Tribe 2. COPEPODITA.

Copepoda, Baird, Brit. Ent. p. 182. Carcinoides, pt. Latr. R. A. iv. p. 152. Denudés ou Gymnonectes, pt. Dumeril, Zool. Anal. p. 177. Copepodes, M. Edw. Crust. iii. p. 411. Crophyropoda, A. Burm. Copepoda Cyclopacea, Dana, Proc. Amer. Acad. Art. & Sci. 1847. Pseudopoda, pt. Latr. Gen. Crust. et Ins. i. p. 19. Univalvia, Latr. Fam. Nat. p. 300.

### FAM. I. CYCLOPIDÆ.

Cyclopidæ, Baird, Brit. Ent. p. 183. Monocles, pt. M. Edw. Crust. iii. p. 423. Pseudopoda, pt. Leach, Ed. Enc. vii. p. 384. Cyclopidées, Leach, Dict. Sc. Nat. xiv. p. 524. Univalvia, Latr. Fam. Nat. p. 300 (1825).

#### 1. CYCLOPS.

Cyclops, Müller, Ent. p. 109. Monoculus, Linn. Nauplius (young), Müller, Ent. p. 40.

1. Cyclops Quadricornis. Satyr or Freshwater-flea.

Cyclops quadricornis, Müller, Ent. p. 109, t. 18, f. 1—4; Latr. Gen. Crust. et Ins. i. p. 19; Ramd. Beytr. i. t. 1, 2; Baird, Mag. Zool. & Bot. i. 321, t. 8, f. 1—4; Brit. Ent. p. 198, t. 24, f. 1—10.

Monoculus quadricornis, Linn. Faun. Suec. p. 2049; Degeer, Mem. vii. p. 483, t. 29, f. 11, 12, t. 30, f. 1—8; Jurine, Hist. i. t. 1—3.

Monocle a queue fourchue, Geoff. Ins. ii. p. 656, t. 21, f. 5.

Cyclops Geoffroyi, Leach, Sam. Brit. Ins. p. 81.

Cyclops vulgaris, Leach, Dict. Sc. Nat. xiv. p. 539; Desm. Cons. p. 362, t. 53, f. 1-4; M. Edw. Crust. iii. p. 425; Cuv. R. A. (Croch.) t. 72, f. 2.

Nauplius saltatorius, Müller, Ent. p. 40, t. 1, f. 3-7 (juv.).

Pediculus aquaticus, Baker, Mic. p. 383, t. 15, f. 1-4.

Small Water-Flea, Pritchard, Mic. Cab. p. 91, t. 9, f. 1, 2.

Satyr, Baker, Empl. for Mic. t. 12, f. 23-26 (young). Food of Vendace, Knox, Trans. Roy. Soc. Edin. xii. t. 11, f. 4.

Was Carles and Wash Double Court and A

Var. Cyclops agilis, Koch, Deutsch. Crust. p. 21, t. 3.

Var. Cyclops quadricornis, var. rubens, albidus, viridis, fuscus, prasinus, Jurine, t. 1—3.

Var. Cyclops pictus, Koch, Deutsch. Crust. p. 21, t. 1.

Var. Cyclops pulchellus, Koch, l. c. p. 21, t. 2.

Var. Cyclops vulgaris, Koch, l. c. p. 21, t. 4.

Var. Cyclops obsoletus, Koch, l. c. p. 21, t. 5.

Var. Cyclops bistriatus, Koch, l. c. p. 21, t. 7.

Var. Cyclops lucidulus, Koch, l. c. p. 21, t. 10. Var. Cyclops phaleratus, Koch, l. c. p. 21, t. 9.

Ponds and Ditches.

a, b. England. From the collection of Dr. Leach. c-q. Near London. Presented by Dr. Baird.

### 2. CANTHOCAMPTUS.

Canthocamptus, Baird, Brit. Ent. p. 204.
Monoculus, Linn. sp.
Cyclops, Müller, sp.
Cyclopsina, sp. M. Edw. Crust. iii. p. 427.
Canthocampus, Westwood, Ent. Text-Book, p. 115.
Canthocarpus, Baird, Proc. Berw. Nat. Club, i. p. 97.
Harpacticus, pt. Dana, Proc. Amer. Acad. Art. & Sc. 1847.
Nauplius, Philippi, Weigm. Arch.
Amymone, Müller, Ent. (juv.)
Doris, Koch.

### 1. CANTHOCAMPTUS MINUTUS. Vaulter.

Canthocamptus minutus, Baird, Brit. Ent. p. 204, t. 25, f. 4, 8, t.

30, f. 3.

Cyclops minutus, Müller, Ent. p. 101, t. 17, f. 1-7; Ramd. Beytr. p. 10, t. 3, f. 1-9; Lam. Hist. An. sans Vert. v. p. 126; Baird, Mag. Zool. & Bot. i. p. 326, t. 9, f. 1-14.

Amymone satyra, Müller, Ent. p. 42, t. 2 (jun.).

Amymone Baccha, Müller, l. c. jun.

Monoculus staphylinus, Jurine, Mon. p. 74, t. 7, f. 1-19

Cyclops staphylinus, Desm. Cons. p. 363, t. 53, f. 6; Baird, Proc. Berw. Nat. Club, i. p. 97, t. 2, f. 1—20.

Nauplius minutus, Philippi, Arch. 1843, p. 69.
Doris minuta, Koch, Deutsch. Crust. p. 35, t. 3.
Vaulter, Pritchard, Micr. Cab. t. 9, f. 5.

a-e. Near London. Presented by Dr. Baird.

### 2. CANTHOGAMPTUS STREMII. Ström's Sea-Vaulter.

Canthocamptus Stromii, Baird, Proc. Berw. Nat. Club, ii. p. 154: Brit. Ent. p. 208, t. 27, f. 3.

Cyclops Stromii, Baird, Mag. Zool. & Bot. i. p. 330, t. 9, f.

23—25.

Cyclops brevicornis, Baird, Proc. Berw. Nat. Club, i. (not Müller). Canthocarpus Stromii, Baird, Proc. Berw. Nat. Club, ii. p. 154. Nauplius Stromii, Philippi, Arch. 1843, p. 69. Stræm. Kiob. Selsk. Skrivt. ix. p. 590.

Pools on Sea-shore (Berwickshire, Dover).

# 3. CANTHOCAMPTUS FURCATUS. Forked Sea-Vaulter.

Canthocamptus furcatus, Baird, Brit. Ent. p. 210, t. 25, f. 1, 2, t. 30, f. 4-6.

Canthocarpus furcatus, Baird, Trans. Berw. Nat. Club, ii. p. 154. Cyclops furcatus, Baird, Mag. Zool. & Bot. i. p. 330, t. 9, f. 26—28.

Cyclopsina furcatus, M. Edw. Crust. iii. p. 429. Nauplius furcatus, Philippi, Arch. 1843, p. 69.

Berwick Bay, Dover, and Poole.

### 4. Canthocamptus minuticornis. Small-horned Sea-Vaulter.

Canthocamptus minuticornis, Baird, Brit. Ent. p. 211, t. 25, f. 3. Cyclops minuticornis, Müller, Ent. p. 117, t. 19, f. 14, 15. Cyclops inermis, Tilesius, Mem. Acad. Petersb. v. t. 8, f. 9. Canthocarpus minuticornis, Baird, Proc. Berw. Nat. Club, ii. p. 154.

Berwick Bay, Dover.

### 3. ARPACTICUS.

Arpacticus, M. Edw. Crust. iii. p. 430. Cyclops, pt. Müller, Ent. p. 114. Nauplius, pt. Philippi, Arch. 1843, p. 69. Harpacticus, pt. Dana.

### 1. ARPACTICUS CHELIFER. Clawed Sea-water-flea.

Cyclops chelifer, Müller, Ent. p. 114, t. 19, f. 1—3; Baird, Mag. Zool. & Bot. i. p. 328, t. 9, f. 15—22.

Cyclops armatus, Tilesius, Mem. Acad. Petersb. v. p. 366, t. 8, f. 7, 8.

Cyclops Johnstoni, Baird, Proc. Berw. Nat. Club, i. p. 97, t. 2, f. 4.

Nauplius chelifer, Philippi, Arch. 1843, p. 69.

Arpacticus chelifer, Baird, Proc. Berw. Nat. Club. ii. p. 154; Brit. Ent. p. 212, t. 29, f. 2, 3.

Sea-coast (Berwick and Dover).

### 2. Appacticus nobilis. Noble Sea-water-flea.

Arpacticus nobilis, Baird, Proc. Berw. Nat. Club, ii. p. 155; Ann. and Mag. Nat. Hist. p. 17, 416, t. 9, f. 5; Brit. Ent. p. 214, t. 28, f. 2, 2 a e.

Berwick and Dover.

#### 2. ALTEUTHA.

Alteutha, Baird, Brit. Ent. p. 216. Cyclops, Baird, Mag. Zool. & Bot. i.

### 1. ALTEUTHA DEPRESSA. Flat Sea-water-flea.

Alteutha depressa, Baird, Proc. Berw. Nat. Club, ii. p. 155; Brit. Ent. p. 216, t. 30, f. 1, 2.

Cyclops depressus, Baird, Mag. Zool. & Bot. i. p. 331, t. 10, f. 9-12.

Berwick Bay.

Diaptomidæ, Baird, Brit. Ent. p. 218.

### 1. DIAPTOMUS.

FAM. II. DIAPTOMIDÆ.

Diaptomus, Westw. Ent. Text-Book.
Omethia, Templeton, Trans. Ent. Soc. ii. p. 118.
Cyclopsina, M. Edw. Crust. iii. p. 427.
Glaucea, Koch, Deutsch. Crust. p. 35.
Cyclops, sp. Müller, Ent. p. 104.
Monoculus, sp. Linn.

### 1. DIAPTOMUS CASTOR. Castor Water-flea.

Diaptomus castor, Westw. Partington's Cycl. Nat. Hist. art. Cyclops; Baird, Brit. Ent. p. 219, t. 26, f. 1—2 a j.

Monoculus castor, Jurine, Mon. p. 50, t. 4—6.
Cyclops castor, Desm. Cons. t. 53, f. 5; Baird, Mag. Zool. & Bot. i. p. 324, t. 10, f. 1—8.
Cyclopsina castor, M. Edw. Crust. iii. p. 427.
Var. Cyclops cæruleus, Müller, Ent. p. 102, t. 15, f. 1—9.
Var. Cyclops lacinulatus, Müller, Ent. p. 105, t. 16, f. 4—6, Q.; Ramd. Beytr. p. 7, t. 2, f. 4—12.
Var. Cyclops rubens, Müller, Ent. p. 104, t. 16, f. 1—3; Baird, Proc. Berw. Nat. Club, i. p. 97, t. 2, f. 2 (jun.).
Var. Glaucea rubens, Koch, Deutsch. Crust. p. 35, t. 4, 3. t. 5, Q. Var. Glaucea cærulea, Koch, l. c. p. 35, t. 6; Baker, Micr. Made Easy, p. 93, t. 9, f. 2.

Ponds and slow running water. a—e. London. Presented by Dr. Baird.

### 2. TEMORA.

Temora, Baird, Brit. Ent. p. 227. Calanus, Leach, Dict. Sc. Nat. xiv. Cyclops, sp. Müller, Ent. p. 115. Monoculus, sp. Gunner.

1. Temora Finmarchica. Long-horned Shine-shrimp.

Temora Finmarchica, Baird, Brit. Ent. p. 228, t. 28, f. 1, 1 a g. Monoculus Finmarchicus, Gunner, Act. Hafn. x. Cyclops Finmarchicus, Müller, Zool. Dan. Prod. p. 2415. Cyclops longicornis, Müller, Ent. p. 115, t. 19, f. 7—9. Calanus Finmarchianus, Leach, Dict. Sc. Nat. xiv.; Krusenstern, Voy. Atlas, t. 22, f. 14. Ireland.

### 1. ANOMALOCERA.

Anomalocera, Templeton, Trans. Ent. Soc. ii. p. 35 (1837). Irenæus, Goodsir, Edin. New Phil. Journ. xxxv. p. 339 (1843). Pontia, Baird, Proc. Berw. Nat. Club, ii. p. 156.

1. Anomalocera Patersonii. Splendid Shine-shrimp.

Anomalocera Patersonii, Templeton, Ent. Trans. ii. p. 35, t. 5, f. 1—3; Baird, Brit. Ent. p. 229, t. 27, f. 1 a i, 2 a c. Irenæus splendidus, Goodsir, Edin. New Phil. Journ. xxxv. p. 338, t. 6, f. 13.

Pontia Patersonii, Baird, Proc. Berw. Nat. Club, ii. p. 156; Kroyer, Voy. en Scand. pl. f.

a. Firth of Forth. Presented by Henry Goodsir, Esq., Surg., R.N.

# FAM. III. CETOCHILIDÆ.

Pontiens, M. Edw. Crust. iii. p. 412. Pontiadæ, Baird, Proc. Berw. Nat. Club, ii. p. 155. Cetochilidæ, Baird, Brit. Ent. p. 233.

#### 1. CETOCHILUS.

Cetochilus, Roussel de Vauzeme, Ann. Sc. Nat. 2me ser. i. p. 333.

- 1. CETOCHILUS SEPTENTRIONALIS. Whale Long-shrimp.
- Cetochilus septentrionalis, Goodsir, Edin. New Phil. Journ. XXXV. p. 336, t. 6, f. 1-11; Thomp. (W.) Ann. Nat. Hist. XX. p. 247; Baird, Brit. Ent. p. 235, t. 29, f. 1 a g.
- a. Firth of Forth. Presented by Henry Goodsir, Esq., Surg., R.N.

#### 1. NOTODELPHYS.

Notodelphys, Allman, Ann. & Mag. Nat. Hist. xx. p. 2 (1847).

- 1. NOTODELPHYS ASCIDICOLA. Allman's Notodelphys.
- Notodelphys ascidicola, Allman, Ann. & Mag. Nat. Hist. xx. p. 2, 1, 2, f. 1—28; Baird, Brit. Ent. p. 238, t. 30, f. 7, 8.
- a—d. Ireland (in the branchial sac of Ascidia communis). Presented by Dr. Allman.

# ORDER II. PŒCILOPODA.

Pœcilopoda, Latr. R. A. iv.
Thecata, Latr. Hist. Nat. Crust. iv.
Branchiopodes parasites, Lam. Hist. An. sans Vert. v. p. 200.
Suceurs, pt. M. Edw. Crust. iii. p. 432.
Parasita, Burm. Beitr. Rankenf. p. 54.
Cormostomata, Dana, Proc. Amer. Acad. Art. & Sci. 1849, p. 53.

# SUB-ORDER I. SIPHONOSTOMA.

Siphonostoma, Latr. Cuv. R. A. iv.; Fam. Nat. p. 305. Caligacea, Dana, Proc. Amer. Acad. Art. & Sci. 1849.

# Tribe 1. PELTOCEPHALITA.

Peltocephala, M. Edw. Crust. iii. p. 436.

# FAM. I. ARGULIDÆ.

Argulidæ, Leach, Dict. Sc. Nat. xiv. Arguliens, M. Edw. Crust. iii. p. 441. Argulina, Kroyer, Nat. Tidsk. i. p. 200. Pneumonura, pt. Latr. Gen. Crust. et Ins. i. p. 12. Caligides, pt. Latr. Fam. Nat. p. 305. Denudes ou Gymnonectes, pt. Dumeril, Zool. Anal. p. 177 (1806).

#### 1. ARGULUS.

Argulus, Müller, Ent. (1785). Ozolus, Latr. Hist. Nat. Crust, iv. (1802). Binoculus, sp. Geoff. Monoculus, sp. Linn.

# 1. ARGULUS FOLIACEUS. Fish Argulus.

Argulus foliaceus, Jurine, Ann. Mus. vii. p. 431, t. 26; (Copied, Yarrell, Brit. Fishes, ii.; Desm. Cons. p. 331, t. 50, f. 1); Guerin, Icon. t. 35, f. 1; M. Edw. Crust. iii. p. 444; (Croch.) R. A. t. 78, f. 1; Vogt. Nouv. Mem. Soc. Helv. vii. (1845), t. 1, f. 2; Baird, Brit. Ent. p. 255, t. 31, f. 1, 2.

Petit Insect Aquatique, Lederm, i. p. 76, t. 37.

Monoculus foliaceus, Linn. Syst. Nat. ed 10, p. 634.

Monoculus piscinus, (pt.) Linn. Syst. Nat. 12 ed. p. 1057 (syn. excl.)

Monoculus cauda-foliacea, Lafling, Att. Ups. t. 2, f. AD.

Argalus Delphinus, Müller, Ent. p. 123; Herm. Mem. Apt. p. 131, t. 5, f. 3, t. 6, f. 11; Leach, Dict. Sc. Nat. xiv, p. 529.

Monoculus argulus, Fabr. Ent. Syst. ii. p. 489. Argulus argulus, Leach, Ed. Enc. vii. p. 388.

Monoculus Gyrini, Cuv. Tabl. Elem, p. 454.

Binoculus Gasterostei, Geoff. Ins. Paris, ii. p. 661; Latr. Gen. Crust. et Ins. i. p. 14.

Ozolus Gasterostei, Latr. Hist. Crust. et Ins. iv. p. 128, t. 29, f. 4.

Argulus charon, Müller, Ent. p. 124, t. 20, f. 1, 2.

Monoculus cyprinaceus, Shaw, Nat. Misc. p. 18, t. 736.

Fisch-laus, Frisch, Ins. Deutsch. vi. t. 10, f. a.

Louse of the Carp, Baker, Micr. p. 374, t. 14, f. 14. Louse of the Banstickle, Baker, l.c. p. 376, t. 14, f. 15.

a—d. Parasitic on Carp and Banstickle. St. James's Park? Presented by Mr. John Marshall.

e. On Stickleback. Highgate Ponds. Presented by Dr. Baird.

# FAM. II. CALIGIDÆ.

Caligides, pt. Latr. Fam. Nat. p. 305. Caligidæ, M. Edw. Crust. iii. p. 445. Caligina, pt. Kroyer, Nat. Tidsk. i. p. 200? Pneumonura, pt. Latr. Gen. Crust. et Ins. i. p. 12. Clypeacés ou Aspidiotes, Dumeril, Zool. Anal. p. 175 (1806). Caligidea, pt. Haan, Faun. Jap. Exp. p. 16.

#### 1. CALIGUS.

Caligus, Müller, Entom. p. 128 (1785). Monoculus, sp. Linn. Binoculus, sp. O. Fabr. Pediculus, Baster. Oniscus, Slabber. Risculus, pt. Leach, Dict. Sc. Nat. xiv. p. 536.

# 1. Caligus diaphanus. Transparent Fish-louse.

Caligus diaphanus, Nordmann, Micr. Beitr. ii. p. 26; Kroyer, Nat. Tidsk. i. p. 623, t. 6, f. 5, \( \bar{2} \); M. Edw. Crust. iii. p. 452; Thomp. Ann. \( \bar{2} \) Mag. Nat. Hist. xx. p. 247; Baird, Brit. Ent. p. 269, t, 32, f. 1; Baster, Op. Subs. p. 2, t. 8, f. 9 B?

a-c. Old collection. ("Caligus piscinus"). d-g. Ireland (on various fish). Presented by W. Thompson, Esq.

# 2. Caligus Rapax. Rapacious Fish-louse.

Caligus rapax, M. Edw. Crust. iii. p. 453, t. 38, f. 9; Baird, Brit. Ent. p. 270, t. 32, f. 2, 3.

a-e. Ireland (on various fish). Presented by W. Thompson, Esq.

### 3. CALIGUS MUELLERI. Cod Fish-louse.

Caligus Mülleri, Leach, Enc. Brit. Suppl. i. p. 405, t. 20, f. 1—8; Sam. Ent. U. Comp. p. 79; Dict. Sc. Nat. xiv. p. 536; Desm. Cons. p. 342, t. 50, f. 4; Johnston, Edin. New Phil. Journ. x. p. 292, t. 7, f. 12, \(\varphi\). 13, \(\delta\). (1824); M. Edw. Crust. iii. p. 450; Baird, Brit. Ent. p. 271, t. 32, f. 4, 5.

Risculus molve, Leach, Dict. Sc. Nat. xiv. p. 536, \(\delta\)?

a, b. Fifeshire (on the Cod). Presented by Dr. Spalding. c-l. Ireland (on various fish). Presented by W. Thompson, Esq.

#### 4. CALIGUS CENTRODONTI.

Caligus Centrodonti, Baird, Brit. Ent. p. 272, t. 32, f. 6, 7. Ireland (on Pagellus centrodonti).

### 5. CALIGUS STURIONIS.

Caligus Sturionis, Kroyer, Nat. Tidsk. t. 6, f. 6?
a. On Streaked Gurnard. Old collection.

### 1. LEPEOPHTHEIRUS.

Lepeophtheirus, Nordm. Micr. Beitr. ii. p. 28. Caligus, pt. Kroyer.

1. LEPEOPHTHEIRUS STREMII. The Salmon Fish-louse.

Lepeoptheirus Stromii, Baird, Brit. Ent. p. 274, t. 32, f. 8, 9.-Laxe luus, Ström. Kiob. Selsk. Skr. x. p. 23, t. 7, f. 1—7. Caligus vespa, Thomp. Ann. & Mag. Nat. Hist. xx. p. 248 (uot M. Edw.).

Caligus Stromii, Baird, Proc. Berw. Nat. Club. 1847.

a—m. Berwick Bay. (Parasitic on Salmon). Presented by Dr. Baird.

2. LEPEOPHTHEIRUS PECTORALIS. Pectoral Fish-louse.

Lepeophtheirus pectoralis, Nordm. Micr. Beitr. ii. p. 30; Kroyer. Nat. Tidsk. i. t. 6, f. 4, ii. p. 8; Baird, Brit. Ent. p. 275, t, 32, f. 10.

Lernma pectoralis, Müller, Zool. Dan. i. p. 41, t. 33, f. 7; Blaine Diet. Sc. Nat. p. 26, 129.

Caligus pectoralis, M. Edw. Crust. iii. p. 454. Pectoral Lernæa, Shaw, Nat. Misc. p. 8, t. 295.

a—d. England. (On Flounder).

c—h. Ireland (on various fish). Presented by W. Thompson, Esq.

South of England (on Callionymus lyra).

3. LEPEOPHTHEIRUS NORDMANNII. Sun-fish Fish-louse.

Lepeophtheirus Nordmannii, Baird, Brit. Ent. p. 275, t. 33, f. f. Caligus Nordmanni, M. Edw. Cuv. R. A. (Croch.) t. 77, f. 1, Crust. iii, p. 455; Thomp. Ann. & Mag Nat. Hist. xx. p. 248.

a—d. Ireland. (Parasitic on Orthagoriscus mola). Presented by W. Thompson, Esq.

- 4. LEPEOPHTHEIBUS HIPPOGLOSSI. Halibut Fish-louse.

  Lepeophtheirus Hippoglossi, Baird, Brit. Ent. p. 276, t. 32, f. 12.

  Caligus Hippoglossi, Kroyer, Nat. Tidsk. i. p. 625, t. 6, f. 3, \( \tilde{\chi} \).

  Caligus hippoglossis, M. Edw. Crust. iii. p. 456.

  Binoculus piscinus, O. Fabr. Faun. Gr. p. 239.

  a—j. Berwick Bay (on Halibut). Presented by Dr. Baird.
- 5. LEPEOPHTHEIRUS OBSCURUS. Brill Fish-louse. Lepeophtheirus obscurus, *Baird*, *Brit. Ent.* p. 277, t. 32, f. 11. Belfast Bay (on Brill).
- 6. LEPEOPHTHEIRUS THOMPSONI. Turbot Fish-louse. Lepeophtheirus Thompsoni, *Baird*, *Brit. Ent.* p. 278, t. 33, f. 2. Ireland (on Turbot).

#### 1. CHALIMUS.

Chalimus, Burm. Nov. Act. Cur. Bonn. xvii.

1. CHALIMUS SCOMBRI. Long-snouted Sucker.

Chalimus scombri, Burm. Nov. Act. Nat. Cur. xvii. p. 294, t. 13, f. 13, 18; M. Edw. Crust. iii. p. 457; Kroyer, Nat. Tidsk. ii. p. 20, t. 1, f. 1; Baird, Brit. Ent. p. 279, t. 33, f. 5, 5 a b.

Ireland (Belfast Bay).

#### 1. TREBIUS.

Trebius, Kroyer, Nat. Tidsk. ii.

- 1. TREBIUS CAUDATUS. The Skate Fish-louse.
- Trebius caudatus, Kroyer, Nat. Tidsk. ii. p. 30, t. 1, f. 4; M. Edw. Crust. iii. p. 458; Thomp. Ann. & Mag. Nat. Hist. xx. p. 248; Baird, Brit. Ent. p. 280, t. 33, f. 3, 4.
- a-d. On "Sharp-nosed Ray." Old collection.
- e—g. Ireland (Belfast Bay, on Skate). Presented by W. Thompson, Esq.

# FAM. III. PANDARIDÆ.

Pandaridæ, Baird, Brit. Crust. p. 281. Pandariens, pt. M. Edw. Crust. iii. p. 461. Caligidæ, III. pt. Leach, Dict. Sc. Nat. xiv. Pandarinæ, Dana, Proc. Amer. Acad.

### 1. DINEMOURA.

Dinemoura, Latr. Cuv. R. A. iv. p. 197; M. Edw. Crust. iii. p. 464. Dinemura, Nordm. Micr. Beitr. Dinematura, Burm. Nov. Act. Nat. Cur. xvii. Pandarus, M. Edw. Ann. Sc. Nat. p. 28.

### 1. DINEMOURA ALATA. Winged Shark-louse.

Dinemoura alata, M. Edw. Crust. iii. p. 464; Baird, Brit. Ent. p. 285, t. 33, f. 6, 7.
Pandarus alatus, M. Edw. Ann. Sc. Nat. p. 28, t. 8; Johnston, Mag. Nat. Hist. viii. p. 202, f. 22.
Dinematura alata, Burm. Nov. Act. Nat. Cur. xvii.
Berwick Bay (on Lamna monensis).

# 2. DINEMOURA LAMNÆ. Johnston's Shark-louse.

Dinemoura Lamnæ, Baird, Brit. Ent. p. 286, t. 33, f. 8. Pandarus Lamnæ, Johnston, Mag. Nat. Hist. viii. p. 204, f. 22. See laus von Hemorfisch, Herbst, Berl. Ges Schrift. i. t. 3, f. 1—8.

Berwick Bay (on Lamna monensis).

#### 2. PANDARUS.

Pandarus, Leach, Enc. Brit. Suppl. p. 405. Caligus, sp. Lam. Pterygopode, Latr. Fam. Nat. p. 306 (1825).

#### 1. Pandabus bicolor. Leach's Shark-louse.

Pandarus bicolor, Leach, Enc. Brit. Suppl p. 405, t. 20, f. 1, 2; Sam. Ent. U. Comp. p. 79; Dict. Sc. Nat. xiv. p. 470, 535; Desm. Cons. p. 339, t. 5, f. 5; M. Edw. Crust. iii. p. 470; Kroyer, Nat. Tidsk. ii. t. 1, f. 6; Baird, Brit. Ent. p. 288, t. 33, f. 10.

Caligus bicolor, Lam. An. sans Vert. v. p. 210.

- a—h. Devon (Torcross, on Squalus galeus). From the collection of Col. Montagu.
- g. Falmouth (on Carcharias glaucus). Presented by W. P. Cocks, Esq.

### 2. PANDARUS BOSCII. Bosc's Shark-louse.

Pandarus Boscii, Leach, Enc. Brit. Suppl. p. 406, t. 20, f. 1—10; Dict. Sc. Nat. xiv. p. 535; Desm. Cons. p. 339; Baird, Brit. Ent. p. 289.

Caligus bicolor (var.), Lam. Hist. An. sans Vert. v. p. 210.

 Devon (Torcross), on Mustelus lævis. From the collection of Col. Montagu.

# FAM. IV. CECROPIDÆ.

Cecropidæ, Baird, Brit. Ent. p. 289. Pandariens, pt. M. Edw. Crust. iii. p. 461. Caligidæ, race 2, Leach, Dict. Sc. Nat. xiv. Bopyridæ, pt. Risso, Hist. Nat. Eur. Mer. Cecropinæ, Dana, Proc. Amer. Acad. Art. & Sci. p. 54 (1849).

### 1. CECROPS.

Cecrops, Leach, Enc. Brit. Suppl. i. (1816).

### 1. Cecrops Latreillii. Sunfish-Sucker.

- Cecrops Latreillii, Leach, Enc. Brit. Suppl. i. p. 405, t. 20, f. 1-5; Desm. Cons. p. 338, t. 50, f. 2; Guerin, Icon. t. 35, f. 8; M. Edw. Crust. iii. p. 474; Baird, Brit. Ent. p. 293, t. 34, f. 1, 2.
- a, b. Salcombe. From an oblong Diodon of 300lbs. weight. Old collection (1800).

- d. Selsey Bill, near Bognor, Sussex. Presented by G. Newport, Esq.
- c. Ireland (near Dublin). Presented by W. Thompson, Esq.

### 1. LÆMARGUS.

Læmargus, Kroyer, Tidsk. i. p. 500.

1. LEMARGUS MURICATUS. Muricated Sunfish-Sucker.

Læmargus muricatus, Kroyer, Nat. Tids. i. p. 487, t. 5, f. A D; M. Edw. Crust. iii. p. 475, t. 39, f. 2; Baird, Brit. Ent. p. 295, t. 34, f. 3, 4.

Ilfracombe (on Orthagoriscus mola).

# Tribe 2. PACHYCEPHALITA.

1 achycephala, M. Edw. Crust. iii.; Baird, Brit. Ent. p. 295.

# FAM. I. ANTHOSOMADÆ.

Anthosomadæ, Baird, Brit. Ent. p. 296. Dichelestidæ, pt. M. Edw. Crust. iii. p. 481. Caligidæ, race. 1, Leach, Dict. Sc. Nat. xiv. Ergasilina, pt. Kroyer.

# 1. ANTHOSOMA.

Anthosoma, Leach, Enc. Brit. Suppl. Caligus, sp. Abildg. Otrophesa, Risso, Hist. Nat. Eur. Mer.

# 1. ANTHOSOMA SMITHII. Bud-like Shark-Sucker.

Anthosoma Smithii, Leach, Enc. Brit. Suppl. i. p. 406, t. 20, f. 1—6; Dict. Sc. Nat. xiv. p. 533; Sam. Ent. U. Comp. p. 80; Desm. Cons. p. 335, t. 50, f. 3; Kroyer, Nat. Tidsk. ii. p. 295, t. 2, f. 2; Guerin, Icon. t. 35, f. 9; M. Edw. Crust. iii. p. 483; Cuv. R. A. (Croch.) t. 79, f. 3; Baird, Brit. Ent. p. 299, t. 33, f. 9.

Caligus imbricatus, Risso, Crust. Nice. p. 162, t. 3, f. 13. Caligus Smithii, Lam. Hist. An. sans Vert. v. p. 210. Otrophesa imbricata, Risso, Hist. Nat. Eur. Mer. v. p. 136.

 a, b. Devon (Exmouth), parasitic on Lamna cornubica. Presented by T. Smith, Esq.

# FAM. II. DICHELESTHIDÆ.

Lernæiformes, Latr. Fam. Nat. p. 306. Dichelestium, Haan, Mem. Apt. p. 125 (1804).

### 1. DICHELESTHIUM.

Caligus, sp. M. Edw. Crust. iii. p. 483.

### 1. DICHELESTHIUM OBLONGUM. Sturgeon-Sucker.

Dichelesthium sturionis, Hermann, Mem. Apt. p. 125, t. 5, f. 7, 8:

Desm. Cons. p. 337, t. 50, f. 6; Kroyer, Nat. Tidsk. i. p. 299, t. 2, f. 5; Guerin, Icon. t. 35, f. 10; Rathke. Nov. Act. Nat. Cur. xix. p. 127, t. 17, f. 1—17; M. Edw. Crust. iii. p. 485, t. 39, f. 4; Cuv. R. A. (Croch.) t. 79, f. 2; Thomp. Rep. Inv. Irel.
Caligus oblongus, Abildg. Selsk. Skrift. iii. p. 52, t. 5, f. 4—11.
South of Ireland. (Thompson).

# FAM. III. ERGASILIDÆ.

Ergasilidæ, Baird, Brit. Ent. p. 299. Ergasiliens, M. Edw. Crust. iii. p. 476. Nicothoidæ, Dana, Proc. Amer. Acad. Sci. & Art. Lernæis forsan adnumeranda, Haan, Faun. Jap. Exp. 16.

#### 1. NICOTHOE.

Nicothoë, Aud. & Edw. Nicothoa, M. Edw. Crust. iii. p. 480 (1840).

### 1. NICOTHOE ASTACI. Lobster-louse.

Nicothoë astaci, Aud. & Edw. Ann. Sc. Nat. ix. p. 345, t. 49, f. 1-9; Burm. Nov. Act. Nat. Cur. xvii. p. 327; Rathke, Nov. Act. Nat. Cur. xx. p. 102, t. 5, f. 1-10; Guerin, Icon. t. 35, f., 12; Kroyer, Nat. Tidsk. ii. t. 3, f. 7; Baird, Brit. Ent. p. 307, t. 33, f. 11

Nicothoa astaci, M. Edw. Crust. iii. p. 481, t. 40, f. 23; Cuv. R. A. (Croch.) t. 79, f. 1.

London Market (on gills of Lobster). a-z. Falmouth. Presented by W. P. Cocks, Esq.

# SUB-ORDER II. LERNÆADÆ.

Vermes, pt. Linn. Syst. Nat. ed. xii. p. 1092 (1766). Lerneadæ, Baird, Brit. Ent.

## Tribe 1. ANCHORASTOMATITA.

Anchorastomacea, Baird, Brit. Ent. p. 323. Chondracanthiens, M. Edw. Crust. iii. p. 491.

#### FAM. 1. CHONDRACANTHIDÆ.

Chondracanthidæ, Baird, Brit. Ent. p. 323.

#### 1. CHONDRACANTHUS.

Chondracanthus, De la Roche, Nouv. Bull. Soc. Phil. ii. (1811). Lernacantha, Blainv. Journ. de Phys. xcv. p. 442 (1822).

# 1. Chondracanthus Zei. Dory-Sucker.

Chondracanthus Zei, De la Roche, Nouv. Bull. Soc. Phil. (1811) ii. p. 270, t. 2, f. 2; Guerin, Icon. t. 9, f. 9; M. Edw. Crust. iii. p. 504; Baird, Brit. Crust. p. 327, t. 35, f. 1.

Lernacantha Delarochiana, Blainv. Journ. de Phys. xcv. p. 442, f. 13; Desm. Cons. p. 350 (excl. syn.).

a, b. S. Coast of England (on gills of Zeus faber). Mr. J. Couch. Mus. Leach.

#### 2. LERNENTOMA.

Lernentoma, Blainv, Journ. de Phys. p. 95 (1822). Anops, pt. Oken, Lehrb. (1815). Entomoda, pt. Lam. Hist. An. sans Vert. iii. (1816). Lernæa, pt. Müller, Zool. Dan. Chondracanthus, pt. Cuv.

# 1. LERNENTOMA CORNUTA. Horned Lernæa.

Lernentoma cornuta, Blainv. Journ. de Phys. p. 95, 441; Dict. Sc.

Nat. p. 26, 126; Baird, Brit. Ent. p. 328, t. 35, f. 2.

Chondracanthus cornutus, Cuv. R. A. iv. p. 258; Nord. Beitr. ii. p. 111, t. 9, f. 5, 6? M. Edw. Crust. iii. p. 500, t. 40, f. 18—22. Lernæa cornuta, Müller, Zool. Dan. i. p. 80, t. 40, f. 6; Prod. ii. p. 227 (1766).

Entomoda cornuta, Lam. Hist. An. sans Vert. p. 685.

Anops cornuta, Oken. Lehrb. der Nat. iii.

Horned Lernæa, Shaw, Nat. Misc. viii. t. 295.

Ireland (on branchize of a sole).

# 2. LERNENTOMA ASELLINA. Piper-Sucker.

Lernentoma asellina, Blainv. Journ. Phys. p. 95, 441; Baird, Brit. Ent. p. 329, t. 35, f. 4.

Lernau asellina, Linn. Faun. Suec. p. 2101; Syst. Nat. i. p. 1093.

Lementoma Triglæ, Blainv. Journ. Phys. p. 95, 441, t. 26, f. 12. Chondracanthus Triglæ, Nord. Micr. Beitr. ii. p. 116, t. 9, f. 1—4;

Burm. Nov. Act. Nat. Cur. p. 17; Guerin, Icon. t. 9, f. 8; Kroyer, Tidsk. ii. p. 135, t. 3, f. 3; M. Edw. Crust. iii. p. 502. Lernæa cauda duplici tereti, Linn. Wast. Res. p. 171, t. 3, f. 4, a b.

Lernæa, Cuv. R. A. iii. t. 15, f. 4.

a. Falmouth (on the branchiæ of the Triglæ). Presented by J. Cranch, Esq.

# 3. LERNENTOMA LOPHII. Angler-Sucker.

Lernentoma Lophii, Baird, Brit. Ent. p. 330.

Chondracanthus Lophii, Johnston, Loud. Mag. Nat. Hist. ix. p. 81, f. 16; Rathke, Nov. Act. Nat. Cur. xx. p. 116, t. 5, f. 11—18. Chondracanthus gibbosus, Kroyer, Tidsk. i. p. 252, t. 2, f. 4. Chondracanthus Delarochiana, pt. M. Edw. Crust. iii.

a-e. Coast of Devon and Scotland, Dr. Leach. Falmouth, J. Couch, Esq.

# Tribe 2. ANCHORACARPITA.

Lerneopodiens, M. Edw. Crust. iii. p. 505. Anchoracarpacea, Baird, Brit. Ent. p. 331.

### FAM. I. LERNÆOPODIDÆ.

Lerneopodiens, pt. M. Edw. Crust. iii. p. 505.

#### 1. LERNÆOPODA.

Lerneupoda, Blainv. Journ. Phys. t. xcv. p. 442. Lernæa, Linn. Pediculus, Gisl. Entomoda, pt. Lam. Hist. Nat. An. sans Vert.

1. LERNEOPODA ELONGATA. Grant's Shark-Sucker.

Lerneopoda elongata, Kroyer, Nat. Tidsk. i. p. 259, t. 21, f. 12, t. 3, f. 3; M. Edw. Crust. iii. p. 515; Baird, Brit. Ent. p. 333, t. 35, f. 5.

Lernæa elongata, Grant, Edin. Journ. Sci. vii. p. 147, t. 2, f. 5. Eye of the Greenland Shark, Scoresby, Arctic Regions, i. p. 538, t. 15, f. 5.

On a Shark, in London Market. (Mr. Yarrell).

2. LERNÆOPODA GALEI. Kroyer's Shark-Sucker.

Lerneopoda Galei, Kroyer, Nat. Tidsk. i. p. 272, t. 3, f. 5; M. Edw. Crust. iii. p. 516; Thomp. Ann. & Mag. Nat. Hist. xx. p. 248; Baird, Brit. Ent. p. 334, t. 35, f. 7.
Belfast Bay (on Squalus galeus).

3. LERNÆOPODA SALMONEA. Salmon-Sucker.

Lerneopoda salmonea, Blainv. Journ. Phys. 1822, p. 127; Baird.
 Brit. Ent. p. 335, t. 35, f. 6.

Pediculus salmonis, Gisler, Kon. Svensk. Acad. Handl. xii. p. 171, t. 8, f. 1-5.

Lernæa salmonea, Linn. Faun. Suec. p. 509; Syst. Nat. i. p. 1093; Ann. Sc. Nat. ix. p. 352 (1826).

Cordiner, Antiq. & Scen. N. Scotl. t. 6, f. 2. Entomoda salmonea, Lam. Hist. An. sans Vert. iii. p. 686. Lerneopoda carpionis, Kroyer, Tidsk. i. t. 2, f. 6; M. Edw. Crust. iii. p. 515.

Scotland (parasitic on the gills of Salmon).

# FAM. II. ANCHORELLADÆ.

Anchorelladæ, Baird. Brit. Ent. p. 336. Lerneopodiens, pt. M. Edw. Crust. iii. p. 505.

# 1. ANCHORELLA.

Anchorella, Cuv. R. A. (1817), p. Lernæa, pt. Ström. Clavella, pt. Oken. Lehrb. Lerneomyzon, Blainv.

# 1. Anchorella uncinata. Hooked-Sucker.

Anchorella uncinata, Nordm. Micr. Beitr. ii. p. 102, t. 8, f. 8, 9, t. 10, f. 1, 5; Kroyer, Nat. Tidsk. i. p. 290, t. 3, f. 8; M. Edw. Crust. iii. p. 519; Baird, Brit. Ent. p. 337, t. 35, f. 9.

Lernæa uncinata, Müller, Zool. Dan. i. p. 76, (1779) t. 33, f. 2; Prodr. ii. p. 226; Johnston, Mag. Nat. Hist. viii. p. 565, f. 53.

Scisturus (uncinata), Oken. Lehrb. iii. p. 183.

Clavella uncinata, Oken. Lehrb. iii.

Lernæomyzon uncinatum, Blaine, Dict. Sci. Nat. xxvi. p. 122. Anchorella lagenula, Enc. Brit. ed. 7th, xxi. t. 502, f. 14.

British Seas (on branchiæ of species of Gadus).

a. Ireland (on Cod or Whiting). Presented by W. Thompson,
Esq.

#### 2. ANCHOBELLA RUGOSA.

Anchorella rugosa, Kroyer, Nat. Tidsk. i. p. 284, t. 2, f. 7, t. 3, f. 14, ac; M. Edw. Crust. iii. p. 519; Baird, Brit. Ent. p. 338, t. 35, f. 8.

Ireland (mouth of Gadus cellarias).

# Tribe 3. ANCHORACERATITA.

Anchoraceracea, Baird, Brit. Ent. p. 338. Lerneoceriens, pt. M. Edw. Crust. iii. p. 521.

#### FAM. 1. PENELLADÆ.

Penelladæ, Baird, Brit. Ent. p. 339. Lerneoceriens, pt. M. Edw. Crust. iii.

#### 1. LERNEONEMA.

Lerneonema, M. Edw. Crust. p. 339, iii. p. 524. Lernæa, sp. Sowerby. Lerneocera, Blainv. Journ. Phys. p. 95. Lerneopenna, Lesueur, Journ. Acad. Phil. iii.

# 1. LERNEONEMA SPRATTA. Eye-Sucker.

Lerneonema spratta, Baird, Brit. Ent. p. 341, t. 35, f. 10. Lernæa spratta, Sowerby, Brit. Misc. t. 68; Turton, Brit. Fauna, i. p. 137.

Lerneonema monillaris, M. Edw. Crust. iii. p. 525, t. 41, f. 5. Lernæa cyclophora, Blainv. Journ. Phys. p. 95, t. 26, f. 7 (part of Lern. sp.)

Lernéide articulée, Blainv. l. c. f. 17.

Eye-sucker, Baker, Phil. Trans. p. 35, 43, t. 1, f. 2, 3.

- a. On the eye of Sprat. English Coast. Presented by Mr. W. Wing.
  - 2. Lerneonema Encrasicoli. Body-Sucker.

Lerneonema Encrasicoli, Baird, Brit. Ent. p. 341, t. 35, f. 11. Lernæa Encrasicoli, Turton, Brit. Faun. i. p. 137.

Ireland (Swansea Bay).

a, b. London Market (on the body of a Sprat). Presented by Mr. John Doubleday.

# 3. LERNEONEMA BAIRDII. Herring-Sucker.

Lerneonema Bairdii, Salter, MSS.

Devonshire (on Herring). Dr. Salter.

#### 2. LERNEOCERA.

Lerneocera, Blainv. Journ. Phys. 1822. Lernæa, sp. Linn.

#### 1. LERNEOCERA CYPRINACEA. Carp-Sucker.

Lerneocera cyprinacea, Blainv. Journ. Phys. p. 95, 377; Desm. Cons. p. 346; Burm. Nov. Act. Nat. Cur. xvii. p. 309, t. 14 A, f. 1—3; M. Edw. Crust. iii. p. 527, t. 40, f. 16; Baird, Brit. Ent. p. 343, t. 35, f. 13.

Lernea cyprinacea, Linn. Faun. Suec. t. 2, f. 1; Syst. Nat. i. p. 1093; Barbut, Genera, t. 7, f. 3; Turton, Brit. Fauna, i. p. 137.

On the Carp and Roach.

#### 3. LERNÆA.

Lernæa, pt. (L.) Burm. M. Edw. Crust. iii. p. 528. Lerneocera, Blainv. M. Edw. Crust. iii. p. 526.

#### 2. LERNEA BRANCHIALIS. Gill-Sucker.

Lernea branchialis, Linn. Syst. Nat. i. p. 1092; Guerin, Icon. t. 9.
f. 1; M. Edw. Crust. iii. p. 528; Kroyer, Nat. Tidsk. i. p. 293, t. 3, f. 10? Baird, Brit. Ent. p. 344, t. 35, f. 12.
Lernæa gadina, Müller, Zool. Dan. iv. p. 65, t. 118, f. 4.

Lerneocera branchialis, Blainv. Journ. Phys. p. 95, 376, t. 26, f. 1, 1 a.

Lernea, Ström. Phys. Og. Œc. Besk. t. 1, f. 18.

a. Gills of Cod. Belfast Bay. Presented by W. Thompson, Esq. Dublin, &c.

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# CATALOGUES OF THE ZOOLOGICAL COLLECTION IN THE BRITISH MUSEUM.

#### I. VERTEBRATA.

- List of Mammalia in the Collection of the British Museum. By J. E. Gray. 1843. 2s. 6d.
- Catalogue of Mammalia in the Collection of the British Museum. Part 1. Cetacea. By. J. E. Grav. 1850. 4s.
- 3. List of Mammalia and Birds of Nepaul, presented by B. H. Hodgson, Esq., to the British Museum. By J. E. Gray and G. R. Gray. 1846. 2s.
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  - Part 1. Raptorial. Edition 1, 1844; edition 2, 1848. 3s. Part 2. Passeres. Section I. Fissirostres. 1848. 2s.
  - Part 2. Passeres. Section 1. Pissirostres. 1646. 2. Part 3. Gallinæ, Grallæ and Anseres. 1844. 2s.
  - 1 alt o. Galilla, Glana and Muscles. 1011. 20.

The other sections of the Passerine birds are in progress.

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  - Part 3. Snakes (Crotalidæ, Viperidæ, Hydridæ & Boidæ). 1849. 2s. 6d.
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- 6. Catalogue of Batrachians. By J. E. GRAY. In the press.
  - N.B. These two Catalogues contain the characters of the genera and species at present known.
- 7. List of Osteological Specimens. By J. E. Gray. 1847. 28.

#### II. ANNULOSA.

- 8. List of Lepidopterous Insects. By E. Doubleday.
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The Lists of Hymenoptera and Diptera contain the description of the species in the Museum which appeared to be undescribed.

11. Nomenclature of Coleopterous Insects. By A. WHITE.

Part 1. Cetoniadæ. 1847. 1s.

Part 2. Hydrocanthari. 1847 1s. 3d.

Part 3. Buprestidæ. 1848. 1s.

Part 4. Cleridæ (with characters of some new species). 1849. 1s. 8d.

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 Catalogue of the Mollusca in the Collection of the British Museum. By J. E. Gray.

Part 1. Cephalopoda, Antepedia. 1849. 4s.

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Containing the characters of the recent and fossil genera and the descriptions of all the recent species at present known.

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Part 1. Cyclophoridæ. In the press.

Part 2. Pholadæ, Anomiadæ and Placunadæ. In the press.

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Part I. Radiata. By J. E. GRAY. 1848. 4s.

Part 2. Sponges. By J. E. GRAY. 1848. 4d.

Part 3 Birds. By G. R. Gray. 4s.

Part 4. Crustacea. By A. WHITE. 1850.

# LIST

OF THE

# SPECIMENS

OF

# BRITISH ANIMALS

IN

# THE COLLECTION

OF THE

# BRITISH MUSEUM.

PART V. - LEPIDOPTERA.

BY

JAMES FRANCIS STEPHENS, F.L.S., P.E.S.

LONDON:

PRINTED BY ORDER OF THE TRUSTEES.

1856.

#### LONDON:

# PRINTED BY EDWARD NEWMAN, 9, DEVONSHIRE STREET, BISHOPSGATE.

# INTRODUCTION.

The object of the present Catalogue has been to give a complete list of all the Lepidopterous Insects that have been recorded as found in Great Britain, indicating at the same time those species that are contained in the Collection, which, since the death of Mr. Stephens, has been enriched by the Cabinet of that Author, containing all the typical species described in his Works.

Great pains have been taken to ascertain every name, which has been applied to the respective species and their varieties, the author of the same, and the date of publication; the references to such names as are unaccompanied by descriptions being included in parentheses: all are arranged chronologically, excepting those to the illustrations and to the figures, which invariably follow their authorities. With these exceptions it has not been attempted to give the synonymy, from the impracticability of so doing, within moderate limits.

#### INTRODUCTION.

may be found quoted at length, up to the period of its publication, in Mr. Stephens' 'Systematic Catalogue of British Insects,' 8vo, 1829.

The species in the British Museum Collection are indicated by the letters B.M., annexed.

This Edition has been carefully revised, and brought up to the present state of the Science, by Messrs. H. T. Stainton and Edwin Shepherd, so well known for their attention to this part of British Entomology.

JOHN EDWARD GRAY.

British Museum,
May 1, 1856.

# CATALOGUE

OF

# BRITISH LEPIDOPTERA.

# CLASS INSECTA HAUSTELLATA.

# ORDER LEPIDOPTERA.

# § 1. RHOPALOCERA.

Rhopalocera, *Boisduval*, *L.* 162, 1836. Ropalocères, *Dum. C.* 222, 1823. Lep.—Diurna, *Lat. G.* iv. 186, 1809.

# Family I. PAPILIONIDÆ.

Papilionidæ, Leach, E. E. ix. 127, 1815.

# Sub-Family I. PAPILIONIDI.

Papilionidi, Step. MSS. Papilionidæ, Dup. C. 21, 1846.

# Genus 1. PAPILIO.

Papilio Auctorum. Amaryssus, Dalm. P. S. 85, 1816, 1.

#### a. Jasonides, Hüb. V. 83, 1816, 9.

#### 1. Papilio Machaon. The Swallow-tailed.

B. M.

Papilio Machaon, *Linn. S. Nat.* i. 462, 1758. *Step. H.* i. 6, 1827. *West. & H. B.* t. 1, f. 1, 1840. Papilio Regiuæ, *Retz. G.* 30, 1783.

Var. a. Papilio Sphyrus, Hüb. Pa. t. 155, f. 775-6, 1822. Var. b. Engram. Pap. d'Eur. ii. 273, t. 70, Sup. 16, f. 68, 1780.

#### Sub-F. II. RHODOCERIDI.

Rhodoceridi, Step. MSS. Rhodoceridæ, Dup. C. 26, 1846. Pierides, p., West. G. 87, 1839.

#### 2. GONEPTERYX.

Gonepteryx, Lea. E.E. ix. 127, 1815. Ganoris, p., Dalm. P. S. 89, 1816, 1. Anteos, Hüb. V. 99, 1816, 9. Rhodocera, Bois. L. i. 597, 1836. Gonopteryx, Bois. (L. i. 598, 1836). Goniapteryx, West. G. 87, 1839.

#### 1. GONEPTERYX RHAMNI. The Brimstone.

B. M.

Papilio Rhamni, Linn. S. Nat. i. 470, 1758. Lew. B. B. t. 31, f. 1—4, 1795.
Goneptervx Rhamni, Step. H. i. 8, 1837.

Papilio canicularis, Retz. G. 30, 1783. Var. a. Gonepteryx Rhamni, Cur. B. E. iv. t. 173, 1827.

#### 3. COLIAS.

Colias, Fab.—Ill. M. vi. 284, 1807. Eurymus, Swain. Z. I. 2, ser. fo. 60, 1832. Ganyra, Dalm. MSS.?

# a. Colotis, Hüb. V. 97, 1816.

# 1. COLIAS EDUSA. The Clouded Yellow.

B. M.

Papilio Edusa, Fab. M. ii. 23, 1787.
Colias Edusa, Step. H. i. 12, 1827.
Papilio croceus, var. a. Four. E. P. ii. 250, 1785.
Papilio Hyale, Don. B. I. ii. 17, t. 43, f. Sup. 1793, S. Papilio Electra, Lew. B. B. 68, t. 32, 1795.

Var. a. Papilio Helice, Hüb. Pa. 2, 87, f. 440. Papilio Edusa-alba, Haw. (Pr. 2, 1802).

Var. b. Colias Crysotheme, Step. H. i. 11, t. 2*, f. 1, 2, 1827.

Var. c. Colias Myrmidone, West. & H. B. 130, t. 42, f. 1—3, 1841. § Colias Edusa, Wing.—Tr. Ent. S. v. 119, t. 14, f. 2, 1849.

### b. XERENE, Hüb. V. 96, 1816.

2. Colias Hyale. The Pale Clouded Yellow.

B. M.

Papilio Hyale, Linn. S. Nat. i. 469, 1758. Colias Hyale, Step. H. i. 13, 1827. Cur. B. E. v. t. 242, 1829. Papilio Palæno, Esp. S. i. 68, t. 4, f. 2, 1777.

# Sub-F. III. PIERIDI.

Pieridi, Step. MSS. Pieridæ, Dup. C. 23, 1846.

#### 4. APORIA.

Aporia, Hüb. V. 90, 1816. Pieris, C. p.; Schr. F. B. ii. 1, 164, 1801. Pontia, p., Fab.—Ill. M. vi. 283, 1807. Leuconea, Donz.—Dup. C. 24, 1846.

APOBIA CRATEGI. The Black-veined White. B. M.
 Papilio Crategi, Linn. S. Nat. i. 467, 1758.
 Pieris Crategi, Step. H. i. 27, 1827. Cur. B. E. viii. t. 360, 1831.

 Papilio nigrovenosus, Retz. G. 30, 1783.

#### 5. PIERIS.

Pieris, C. p.; Schr. F. B. ii. 1, 164, 1801. Pontia, Fab.—Ill. M. vi. 283, 1807. Ganoris, p., Dalm. P. S. 86, 1816, 1. Catophaga, Hüb. V. 93, 1816, 9.

#### a. Pieris.

PIERIS BRASSICE. The Great White Cabbage.
 Papilio Brassice, Linn. S. Nat. i. 467, 1758. Lew. B. B. 56, t. 25, f. 1-5, 1795.
 Pontia Brassice, Step. H. i. 15, 1827.

BS

#### 9. LASIOMMATA.

Lasiommata, West. & H. B. 65, 1840.

- a. PABARGE, Hüb. V. 59, 1816.
- LASIOMMATA ÆGERIA. The Speckled Wood.
   Papilio Ægeria, Linn. S. Nat. i. 473, 1758. Lew. B. B. 42, t. 19, f. 1—4, 1795.
   Hipparchia Ægeria, Step. H. i. 54, 1827.

#### b. DIRA, Hüb. V. 59, 1816.

Lasiommata Megæra. The Wall.
 Papilio Megæra, Linn. S. Nat. ii. 771, 1767. Lew. B. B. 46, t. 21, f. 1—5, 1795.
 Hipparchia Megæra, Step. H. i. 55, 1827.
 Papilio Mæra, Berk. S. i. 125, 1788.
 Var. a. Engram. Pap. d'Eur. ii. t. 65, Sup. ii. f. 50, g, h. 1780.

#### 10. HIPPARCHIA.

Hipparchia, Fab.—Ill. M. vi. 281, 1807. Satyrus, Bois. I. M. 2 ed. 30, 1840.

# a. Eumenis, Hüb. V. 58, 1816.

HIPPARCHIA SEMELE. The Grayling.
 Papilio Semele, Linn. S. Nat. i. 474, 1758. Lew. B. B. 38, t. 17, f. 1-5, 1795.
 Hipparchia Semele, Step. H. i. 56, 1827.

# b. Epinephila, Hüb. V. 59, 1816.

HIPPARCHIA JANIRA. The Meadow Brown.
 Papilio Janira, Linn. S. Nat. i. 475, 1758.
 Lew. B. B. 40, t. 18, f. 1-5, 1795.
 Hipparchia Janira, Step. H. i. 59, 1828.
 Papilio Jurtina, Linn. S. Nat. i. 475, 1758.

Var. a. Engram. Pap. d'Eur. ii. 2, lxvi. Sup. xii. f. 54, l, m, 1782.

### c. Pyronia, Hüb. V. 55. 1816.

3. HIPPARCHIA TITHONUS. The Gate Keeper.

B. M.

Papilio Tithonus, *Linn. Mant.* i. 537, 1771. *Lew. B. B.* 48, t. 22, f. 1—5, 1795.

Hipparchia Tithonus, *Step. H.* i. 58, 1828.

Hipparchia Tithonus, Step. H. i. 58, 1828. Papilio Pilosellæ, Fab. S. E. ii. 497, 1775. Papilio Herse, Schiff. (W. V. 320, 1776). Papilio Phædra, Esp. S. i. 120, t. ix. f. 1, 1777. Papilio Amaryllis, Bork. E. S. i. 80, 1788. Papilio Tithonius, Vill. E. ii. 26, 1789.

#### 11. ENODIA.

Enodia, Hüb. V. 61, 1816.

1. ENODIA HYPERANTHUS. The Ringlet.

В. М.

Papilio Hyperanthus, Linn. S. Nat. i. 471, 1758. Lew. B. B. 44, t. 20, f. 1--5, 1795.

Hipparchia Hyperanthus, Step. H. i. 60, 1828. Papilio Polymeda, Scop. C. No. 434, 1763.

Var. a. Papilio Vidua, Müll. F. F. 36, 1764.

Hipparchia Hyperanthus, West. & H. B. 70, t. 20, f. 7, 1841.

Var. b. Papilio Arete, Müll. F. F. 36, 1764.
Papilio Polymeda, Hüb. Pa. t. 38, f. 173*.

#### 12. EREBIA.

Erebia, Dalm. P. S. 81, 1816. Melania, Sodoff.—Bull. S. I. Mosc. 8, 1837. Oreina, West. & H. B. 76, 1840.

# a. EPIGEA, Hüb. V. 62, 1816.

*1. Erebia Ligea. The Scarce Scotch Argus.

Papilio Ligea, Linn. S. Nat. i. 467, 1758.

Hipparchia Ligea, Step. H. i. 61, t. 6, f. 1—3, 1828.

Papilio Alexis, Linn. F. No. 787, 1746.

2. EREBIA BLANDINA. The Scotch Argus.

Papilio Blandina, Fab. M. ii. 41, 1787.

Hipparchia Blandina, Step. H. i. 62, 1828.

Oreina Blandina, West. & H. B. 77, t. 23, f. 5—10, 1841.

Papilio Medea, Schiff. (W. V. 167, 1776) non Fab.a). Hüb. Pa. t. 48, f. 220-222.

Papilio Ethiops, Esp. S. i. 312, t. 25, Sup. i. f. 3, 1777.

Papilio Medusa, *Bork. E. S.* i. 235, 1788. Q. Papilio Alcyone, *Stew. E.* 2 ed. ii. 132, 1818.

Papilio Amaryllus, Walker, MSS.

Var. a. Oreina Blandina, var. Angl. West. & H. l. c. f. 7. Var. b. Papilio Neoridas, Frey. B. i. 110, t. 55, f. 3, 4, 1835?

#### b. MELAMPIAS, Hüb. V. 63, 1816.

3. EREBIA CASSIOPE. The Small Ringlet.

B. **M**.

Papilio Cassiope, Fab. E. S. iii. 1, 238, 1793.
Hipparchia Cassiope, Step. H. i. 63, t. 8, f. 1—3, 1828.
Papilio Melampus, var., Esp. S. i. 2, 131, t. lxxviii., Cont. xxviii. f. 2, 1780.
Papilio Ethiops minor, Vill. E. ii. 37, 1789.

Papilio Mnemon, Haw.—Ent. Tr. i. 332, 1812. Var. a. Hipparchia Melampus, Newm.—Zool. 729, 1844.

#### 13. CŒNONYMPHA.

Cœnonympha, Hüb. V. 65, 1816.

1. CENONYMPHA DAVUS. The Marsh Ringlet.

B. M.

Papilio Davus, Fab. G. 259, 1776. Hipparchia Davus, S. i. 67, t. 7, f. 1—3, 1828. Papilio Philoxenus, Esp. S. i. 2, 25, t. 54, Cont. 4, f. 3, 1777. Municia Tinhon, Sche E. B. ii. 1, 129, 1801.

Maniola Tiphon, Schr. F. B. ii. 1, 179, 1801. Var. a. Papilio Tullia, Müll.? F. F. 36, 1764.

Papilio Iphis, *Bork.—Rhein. M.* i. 241, 1793. Var. b. Papilio Musarion, *Bork. E. S.* i. 92, 1788.

Var. c. Papilio Musarion, Bork. E. S. 1. 92, 1786 Var. c. Papilio Polydama, Haw. L. B. 16, 1803.

Hipparchia Polydama, Step. H. i. 147, t. 7, f. 3, 1828.

Hipparchia Polymeda, Jerm. 47, 1827.

Var. d. Papilio Typhon, Haw. (Pr. 2, 1802). Id. L. B. 16, 1803. Papilio Davus, Goda. L. F. ii. 155, 1822.

Hipparchia Iphis? Step. H. i. 64, 1828.

Var. e. Papilio Laidion, Bork. E. S. i. 91, 1788.

MEDEA. Papilio Medea, Fab. S. E. 508, 1775. Hab. in India.

2. CENONYMPHA PAMPHILUS. The Small Heath.

**B. M**.

Papilio Pamphilus, Linn. S. Nat. i. 472, 1758. Lew. B. B. 50, t. 23, f. 1-4, 1795.

Hipparchia Pamphilus, Step. H. i. 69, 1828. Papilio Menalcas, Scop. C. No. 458, 1764. Papilio Nephele, Bork. E. S. i. 87, 1788.

## Sub-F. II. NYMPHALIDI.

Nymphalidi, Step. MSS. Nymphalidæ, Dup. C. 8, 1846.

### 14. LIMENITIS.

Limenitis, Fab.—Ill. M. vi. 281, 1807. Limonitis, Dalm. P. S. 64, 1816.

1. LIMENITIS SIBILLA. The White Admiral.

B. M.

Papilio Sibilla, Fab. S. E. 512, 1775.

Papilio Camilla, Lew. B. B. 18, t. 8, f. 1, 2, 1795.

Limentia Camilla, Cuesta, B. F. iii 124, 1826.

Limenitis Camilla, Curtis, B. E. iii. 124, 1826. Step. H. i. 52, 1827.

Papilio Prorsa, *Linn. M. U.* 303, 1764.

5. Papilio Sibilla, *Linn. S. N.* ii. 781, 1767.

Q. Papilio Camilla, *Linn. S. N.* ii. 781, 1767.

Var. a. Engram. Pap. d'Eur. ii. 236, t. 57, Sup. 3, f. 13, g, h, 1780.

#### 15. APATURA.

Apatura, Fab.—Ill. M. vi. 281, 1807. Doxocopa, Hüb. V. 49, 1816. Apaturia, Sodoff.—Bull. S. I. Mosc. 8, 1837.

1. APATURA IRIS. The Purple Emperor.

B. M.

Papilio Iris, Linn. S. Nat. i. 476, 1758.
 Apatura Iris, Step. H. i. 50, 1827. Cur. B. E. vii. t. 338, 1831.

# Sub-F. III. VANESSIDI.

Vanessidi, Step. MSS. Vanessidæ, Dup. C. 6, 1846.

#### 16. CYNTHIA.

Cynthia, Fab.—Ill. M. vi. 281, 1807. Vanessa, Hüb. V. 33, 1816.

1. CYNTHIA CARDUI. The Painted Lady.

B. M.

Papilio Cardui, Linn. S. Nat. i. 475, 1758. Lew. B. B. 20, t. 6, f. 1—4, 1795. Cynthia Cardui, Step. H. i. 47, 1827.

#### 17. VANESSA.

Vanessa, Fab.—Ill. M. vi. 281, 1807. Aglais, Dalm. P. S. 65, 1816. Phanessa, Sodoff.—Bull. S. I. Mosc. 7, 1837.

a. Pyrameis, Hüb. V. 33, 1816. Ammiralis, Ren. C. 10, 1832.

1. VANESSA ATALANTA. The Red Admiral.

B. M.

Papilio Atalanta, *Linn. S. Nat.* i. 478, 1758.
Lew. B. B. 16, t. 7, f. 1—4, 1795.
Vanessa Atalanta, *Step. H.* i. 46, 1827.
Papilio Ammiralis, *Linn. F.* No. 777, 1746.

b. INACHIS, Hüb. V. 37, 1816.

2. VANESSA Io. The Peacock.

B. M.

B. M.

Papilio Io, Linn. S. Nat. i. 472, 1758. Lew. B. B. 12, t. 4, f. 1—4, 1795.

Vanessa Io, Step. H. i. 44, 1827.

Var. a. Vanessa Ioides, Dahl. C. & L. 1823, var. minor.

c. Eugonia, Hüb. V. 36, 1816.

3. Vanessa Antiopa. The Camberwell Beauty.
Papilio Antiopa, Linn. S. Nat. i. 476, 1758.

Vanessa Antiopa, Step. H. i. 45, 1827. Vanessa Antiope, Curtis, B. E. ii. t. 96, 1825.

Papilio Morio, Linn. F. No. 771, 1746.

4. Vanessa Polychloros. The Large Tortoise-shell. B. M.

Papilio Polychloros, *Linn. S. Nat.* i. 477, 1758. *Lew. B. B.* 8, t. 2, f. 1—4, 1795.

Vanessa Polychloros, Step. H. i. 42, 1827.

Var. a. Papilio Pyrrhomelæna, Hüb. Pa. t. 171, f. 845.

Var. b. Papilio Testudo, Esp. S. i. 2, 118, t. 63, Cont. 23, f. 1, 2.

5. VANESSA URTICÆ. The Tortoise-shell.

B. M.

Papilio Urticæ, Linn. S. Nat. i. 477, 1758. Lew. B. B. 10, t. 3, f. 1-4, 1795.

Vanessa Urticæ, Step. H. i. 43, 1827.

Var. a. Vanessa Xanthomelæna, Step. MSS.

Vanessa Urticæ, var. West. & H. B. 52, t. 13, f. 13, 1840.

Var. b. Vanessa Ichneusioides, De Selys? L. de B. 31, 1844.

#### 18. GRAPTA.

Grapta, Kir. (F. B. A. iv. 292, 1837). Polygonia, Hüb. V. 36, 1816. Comma, Ren. C. 8, 1832.

1. GRAPTA C-ALBUM. The Comma.

B. M.

Papilio C-album, Linn. S. Nat. i. 477, 1758. Lew. B. B. 14, t. 5, f. 1-5, 1795.

Vanessa C-album, Step. H. i. 42, 1827.

Papilio G-album, Four. E. P. ii. 235, 1785.

Vanessa Comma-alba, Mill. B. E. t. 1, f. 3, 1821.

Var. a. Vanessa Melanosticta, Step. MSS.

Papilio C-album, Hüb. Pa. t. 125, f. 637, 638.

### Sub-F. IV. ARGYNNIDI,

Argynnidi, Step. MSS. Argynnidæ, Dnp. C. 2, 1846.

### 19. ARGYNNIS.

Argynnis, Fab.—Ill. M. vi. 283, 1807.

a. Argyronome, Hüb. V. 32, 1816.

ABGYNNIS PAPHIA. The Silver-washed Fritillary.
 Papilio Paphia, Linn. S. Nat. i. 481 1758. Lew. B. B. 22, t. 9, f. 1—4, 1795.

Argynnis Paphia, Step. H. i. 40, 1827. Papilio Imperator, Linn. F. No. 779, 1746. Var. Papilio Paphia, Hüb. Pa. t. 163, f. 767, 765. § . Papilio Paphia, Hüb. Pa. t. 190, f. 935, 936.

# b. ACIDALIA, Hüb. V. 31, 1816.

2. ARGYNNIS AGLAIA. The Dark Green Fritillary. B. M.

Papilio Aglaia, Linn. S. Nat. i. 481, 1758. Lew. B. B. 26, L 11, f. 1-4, 1795.

Argynnis Aglaia, Step. H. i. 39, 1827.

Var. a. Papilio Charlotta,* Haw. L. B. 32, 1803, var. Sow. B. M. i. t. 11, 1806.

Papilio Caroletta, Jerm. B. C. V. 2, ed. 107, 1827.

Var. b. Papilio Emilia, * Acerbi. V. iii. 175, t. xv. f. 1, 2, 1804.

Var. c. Argynnis Aglaia,* Cur. B. E. vii. t. 299, 1830.

Var. d.* Engram. Pap. d Eur. ii. 238, t. lviii. Sup. iv. f. 16, k, l, 1782.

ARGYNNIS ADIPPE. The High Brown Fritillary.
 Papilio Adippe, Linn.? S. Nat. i. 786, 1767. Lew. B. B. 24, t. 10, f. 1—4, 1795.
 Argynnis Adippe, Step. H. i. 38, 1829.
 Papilio Cydippe, Linn. F. ii. No. 1066, 1761.

# c. ISSORIA, Hüb. V. 31, 1816.

ARGYNNIS LATHONIA. The Queen of Spain Fritillary. B. M. Papilio Lathonia, Linn. S. Nat. i. 481, 1758. Lew. B. B. 28, t. 12, f. 1-4, 1795.
 Argynnic Lathonia Step H i. 36, 1827.

Argynnis Lathonia, Step. H. i. 36, 1827. Papilio Principissa, Linn. F. No. 781, 1746. Papilio Latonia, Schiff. (W. V. 177, 1776). Papilio Lathona, Hüb. Pa. t. 11, f. 59, 60.

# d. ARGYNNIS, Hüb. V. 30, 1816.

Argynnis Selene. The Small Pearl-bordered Fritillary. B. M. Papilio Selene. Schiff. (W. V. 321, 1776).
 Melitza Selene. Step. H. i. 34, 1827.
 Papilio Euphrosyne. var. Scop. C. No. 441, 1764.

Papilio Maturna, Berk. P S. i. 128, 1789.

Papilio Euphrasia, Lew. B. B. 30, t. 13, f. 3, 4, 1795. Papilio Silene, Haw. L. B. 34, 1803.

Var. a. Papilio Pales, Berg. N. 31, t. 84, f. 6, 7, 1778.

Var. b. Papilio Marphisa, Herbs. x. 105, t. 270, f. 8, 9, 1795.

Var. c. Papilio Rinaldus, Herbs. x. 108, t. 271, f. 1, 2, 4, 1795.

ARGYNNIS EUPHROSYNE. The Pearl-bordered Fritillary. B. M. Papilio Euphrosyne, Linn. S. Nat. i. 481, 1758. Lew. B. B. 30, t. 13, f. 1, 2, 1795.
 Melitæa Euphrosyne, Step. H. i. 35, 1827.
 Papilio Princeps, Linn. F. No. 327, 1746.
 Papilio argenticollis, Retz. G. 31, 1783.
 Var. a. Papilio Euphrasia, Haw. MSS.

Var. b. Papilio Thalia, Hüb. Pa. t. 11, f. 57, 58.

#### 20. MELITÆA.

Melitæa, Fab.—Ill. M. vi. 28, 1807. Melinæa, Sodoff.—Bull. S. I. Mosc. 7, 1837.

# a. Schenis, Hüb. V. 28, 1816.

Melitea Cinxia. The Glanville Fritillary.
 Papilio Cinxia, Linn. S. Nat. i. 480, 1758. Lew. B. B. 32, t. 14, f. 1—4, 1795.
 Melitea Cinxia, Step. H. i. 33, 1827.

Papilio Pilosellæ, Esp. S. i. 312, t. 47, f. 2, 1777. Papilio Abbacus, Retz. G. 32, 1783.

Papilio Delia, Hüb. Pa. t. 2, f. 7, 8. Papilio Trivia, Schr. F. B. ii. 1, 205, 1801.

# b. Cinclidia, Hüb. V. 29, 1816.

2. MELITEA ATHALIA. The Heath Fritillary. B. M.

Papilio Athalia, *Esp. S.* i. 377, t. xlvii., *Sup.* xxiii. 1777. Melitæa Athalia, *Step. H.* i. 30, <del>18</del>27. Papilio Maturna, *Schiff.* (W. V. 179, 1776).

Papilio Maturna, Schiff. (W. V. 179, 1776).

Papilio Dictynna, Lew. B. B. 32, t. 14, f. 5—6, 1795.

Var. a. Papilio cuneigera, Haw. M.S.S.

Var. b. Papilio Pyronia, Hüb. Pa. t. 114, f. 585—88.
 Melitæa Pyronia, Step. H. i. 31, t. iv. f. 1, 2, 1827.
 Papilio Eoa, Haw. L. B. 35, 1803.

Var. c. Papilio tessellata, Pet. P. t. 3, f. 11, 12, 1717. Melitza tessellata, Step. H. i. 31, t. 5, f. 1, 2, 1827.

# c. MELITEA, Hüb. V. 28, 1816.

Melitæa Artemis. The Greasy Fritillary.
 Papilio Artemis, Schiff: (W. V. 322, 1776). Lew. B. B. 34, t. 15, f. 1—4, 1795.
 Melitæa Artemis, Step. H.: i. 32, 1827.
 Papilio Maturna, Esp. S. i. 209, t. xvi. f. 2, 1777.
 Papilio Lye, Bork. E. S. i. 225, 1788.
 Papilio Matutina, Thunb. Diss. iii. 45, 1791.

Melitæa Cinxia, Dunc. B. B. t. 14, f. 2 (non desc.), 1835.

# Fam. III. ERYCINIDÆ.

Erycinidæ, West. M. C. I. ii. 347, 1840. Erycinides, Bois. L. i. 164, 1836.

### 21. NEMEOBIUS.

Nemeobius, Step. H. i. 28, 1827. Hamearis, p., Hüb. V. 19, 1816.

 Nemeobius Lucina. The Duke of Burgundy Fritillary. B. M. Papilio Lucina, Linn. S. Nat. i. 480, 1758.
 Nemeobius Lucina, Step. H. i. 29, 1827.
 Hamearis Lucina, Cur. B. E. vii. t. 316, 1830.

# Fam. IV. LYCÆNIDÆ.

Lycanida, Leach, E. E. ix. 129, 1815. Polyommatida, Swains.—Phil. M. i. 187, 1827. (Cupido, Schr. F. B. ii. 1, 153, 1801).

B. M.

### 22. THECLA.

Thecla, Fab.—Ill. M. vi. 286, 1807. Zephyrus, § Aurotis, Dalm. P. S. 90, 1816.

## a. STRYMON, Hüb. V. 74, 1816.

- THECLA BETULE. The Brown Hairstreak.
   Papilio Betulæ, *Linn. S. Nat.* i. 482, 1758. *Lew. B. B.* 88, t. 42, 1795.
   Thecla Betulæ, *Step. H.* i. 75, 1828.
- THEOLA PRUNI. The Dark Hairstreak.
   Papilio Pruni, Linn. S. Nat. i. 482, 1758.
   Thecla Pruni, Step. H. ii. 66, 1828. Cur. B. E. vi. t. 264, 1829.
   Papilio Prorsas, Hüfn. ?—Berl. M. ii. 68, 1766.
   Thecla Spini, Brit. B. 30, 1828.
- 3. THECLA W-ALBUM. The Black Hairstreak.

  Papilio W-album, Knoch. B. ii. 85, 1782.

  Thecla W-album, Step. (H. ii. 66, 1828).

  Papilio Pruni, Bergs. N. t. 71, f. 1, 2, 1778.

  Papilio W-Latinum, Lang. V. ii. 46, 1789.

  Papilio Pruni, Lew. B. B. 92, t. 44, f. 1, 2. 1795.

  Thecla Pruni, Step. H. i. 77, 1828.

# b. Вітнув, *Hüb. V.* 75, 1816.

- THECLA QUERCUS. The Purple Hairstreak.
   Papilio Quercus, Linn. S. Nat. i. 482, 1758.
   Lew. B. B. 90, t. 43, 1795.
   Thecla Quercus, Step. H. i. 76, 1828.
  - c. Lycus, (Genus Coleopt.), Hüb. V. 74, 1816.
- THECLA RUBI. The Green Hairstreak.
   Papilio Rubi, Linn. S. Nat. i. 483, 1758. Lew. B. B. 92, t. 44, f. 3—6, 1795.
   Thecla Rubi, Step. H. i. 78, 1828.

#### 23. CHRYSOPHANUS.

Chrysophanus, Hüh. V. 72, 1816. Zephyrus, § Heodes, Dalm. P. S. 92, 1816. Polyommatus, Baisd. I. M. 10, 1829. Migonitis, Sodoff.—Bull. S. I. Masc. 8, 1837. Lycana, Fab.—Step. H. i. 79, 1828.

1. CHRYSOPHANUS PHLEAS. The Copper.

B. M.

Papilio Phlæas, Linn. F. ii. No. 1078, 1761. Lew. B. B. 86, t. 41, f. 3, 4, 1795.

Lycana Phlaas, Step. H. i. 79, 1828.

Var. a. Chlorophanus Phlwas, var.* West. & H. B. 94, t. 28, f. 8, 1841.

Var. b.* Engram. Pap. d'Eur. ii. t. lxxii. Sup. xviii. f. 91, g, h.

- *2. Chrysophanus Virgaurer. The Scarce Copper. B. M. Papilio Virgaurer, Linn. S. Nat. i. 484, 1758. Lew. B. B. 86, t. 41, f. 1, 2, 1795. Lycena Virgaurer, Step. H. i. 83, 1828.
- Chrysophanus Chryseis. The Purple-edged Copper. B. M. Papilio Chryseis, Schiff. (W. V. 181, 1776). Sow. B. M. i. 27, t. 13, 1806.
   Lycana Chryseis, Step. H. i. 80, 1828.

Papilio Eurydice, Bork. E. S. i. 143, 1778.

- Papilio Hippothoë, var. Esp. S. i. Sup. 38, t. c. Cont. iv. f. 2, 1793?
- 4. Синуворнамия Нарротнов. The Dark Underwinged Copper.
  Papilio Hippothoë, Linn. Р. F. ii. No. 1046, 1761.
  Lycæna Hippothoë, Step. H. i. 82, 1828.
- 5. Chrysophanus dispar. The Large Copper. B. M. Papilio dispar, Haw. (Pr. 3, 1802). Id. L. B. 40, 1803. Lycena dispar, Car. B. E. i. t. 12, 1824. Step. H. i. 81, 1828. Papilio Hippothoë, var. Esp. S. i. 1, 350, t. 38, Sup. 14, f. 1, 2, 1778. Papilio Hippothoë, Hüb. Pa. t. 195, f. 966—968. (Var. prec. ?).

#### 24. POLYOMMATUS.

Polyommatus, Lat. R. A. iii. 553, 1817. Zephyrus, § Cyaniris, Dalm. P. S. 95, 1816. Lycæna, Boisd. I. M. 2 edit. 10, 1840.

## a. PITHECOPS, Horsf. D. C. i. 66, 1828.

1. POLYOMMATUS ARGIOLUS. The Azure Blue.

B. M.

Papilio Argiolus, Linn. S. Nat. i. 483, 1758. Lew. B. B. 76, t. 36, f. 4-6, 1795.
Polyommatus Argiolus, Step. H. i. 85, 1828.
Papilio Cleobis, Esp. S. i. 360, t. xl., Sup. xvi. f. 3, 1778.
Papilio Acis, Hib. Pa. t. 57, f. 272-274.

## b. Nomiades, Hüb. V. 67, 1816.

2. POLYOMMATUS ALSUS. The Small Blue.

B. M.

Papilio Alsus, Schiff. (W. V. 184, 1776). Fab. M. ii. 73, 1787. West. & H. B. 100, t. 31, f. 4—8, 1841. Polyommatus Alsus, Step. H. i. 86, 1828. Papilio minimus, Esp. S. i. 1, 338, t. 34, Sup. x. f. 3, 1778. Papilio Pseudolus, Bork. E. S. i. 177, 1788.

3. Polyommatus Acis. The Mazarine Blue.

B. M.

Papilio Acis, Schiff. (W. V. 182, 1776).
Polyommatus Acis, Step. H. i. 86, 1828.
Papilio semiargus, Bork. E. S. i. 172, 1788.
Papilio Cimon, Lew. B. B. 80, t. 38, f. 6, 7, 1795.
Papilio Argiolus, Hüb. Pa. t. 56, f. 267—269.

4. POLYOMMATUS ARION. The Large Blue.

B. M.

Papilio Arion, Linn. S. Nat. i. 483, 1758.
Polyommatus Arion, Step. H. i. 87, 1828. West. & H. B. 104, t. 32, f. 1—3, 1841.

Var. a. Polyommatus Alcon, Step. H. i. 88, 1828.

## c. AGRIADES, Hüb. V. 67, 1816.

5. POLYOMMATUS CORYDON. The Chalk-hill Blue. B. M.

Papilio Corydon, Scop. E. C. 179, 1764. Low. B. B. 76, t. 36, f. 1-3, 1795.

Polyommatus Corydon, Step. H. i. 88, 1828.

Papilio Tiphys, Esp. S. i. 26, t. 51, Cont. 1, f. 4, 1780?
 Vur. a. Polyommatus Calathis, Jerm. B. C. V. 2 ed. 169, 1827.

6. POLYOMMATUS ADONIS. The Clifden Blue. B. M.

Papilio Adenis, Schiff. (W. V. 184, 1776) Lew. B. B. 80, t. 38, f. 1-3, 1795.

Polyommatus Adonis, Step. H. i. 89, 1828.

Papilio Bellargus, Esp. S. i. 333, t. 32, Sup. 8, f. 3, 1778?

Papilio Ceronus, Hub. Pa. t. 61, f. 295-297.

Papilio Argus, Q, Don. B. I. iv. 75, t. 143, f. 1, 1795. Var. a. Papilio Hyacinthus, Lew. B. B. 78, t. 78, f. 4-6, 1795. Polyommatus Dorylas, Step. H. i. 90, 1828.

7. POLOMMATUS ALEXIS. The Common Blue. B.M.

Papilio Alexis, Schiff. (W. V. 184, 1776).

Polyommatus Alexis, Step. H. i. 91, 1828 (non Fabr.)

Papilio Icarus, Vill. E. ii. 74, 1789. Lew. B. B. 80, t. 38, f. 4, 5, 8, 1795.

Papilio Argus, Berh. S. i. 129, 1789.

Lycana Dorylas, Leuch (E. E ix. 129, 1815).

Q. Papilio Thetis, Esp. S. i. 335, t. 33, Sup. 9, f. 3, 1778?

Var. a. Papilio Polyphemus, Esp. S. i. 387, 1.50, Sup. 26, f. 2, 1778?

Var. b. Polyommatus Labienus, Jerm. B. C. V. 58, 1825. Polyommatus Eros, Step. H. i. 93, 1828.

Q. Var. Polyommatus Lacon, Jerm. B. C. V. 2 edit. 168, 1827.

Q. Var. a. Polyommatus dubins, Kirby, MSS.

Q. Var. b. Polyommatus Icarius, Step. H. i. 91, 1828.

Aber. Polyommatus Thestylis, Jerm. 2 edit 167, 1827, aber.

§. Polyommatus Alexis,* West. & H. B. 109, t. 34, f. 11, 1841.

# d. Lycaides, Hüb. V. 69, 1816.

8. POLYOMMATUS ÆGON. The Silver-studded Blue. B. M.

Papilio Ægon, Schiff. (W. V. 185, 1776). Papilio Philonomus, Bork. E. S. i. 166, 1788. Papilio Alsus, Esp. S. i. Sup. 46, t. 150, Cont. 56, f. 3-5, 1798.

Papilio Argus, Lew. B. B. 82, t. 39, f. 5, 6, 1795.

Polyommatus Argus, Step. H. i. 93, 1828. Var. a. Papilio maritimus, Haw. MSS. Polyommatus Alcippe, Kirby, MSS.

9. POLYOMMATUS AGESTIS. The Brown Arrus.

B. M.

Papilio Agestis, Schiff. (W. V. 184, 1776).
Polyommatus Agestis, Step. H. i. 94, 1828.
Papilio Astrarche, Berg. N. 49, 1778.
Papilio Alexis, Hifn.—Naturf. vi. 10, 1779?
Papilio Idas, Lew. B. B. 82, t. 39, f. 1, 2, 1793.

- Papilio Idas, Lew. B. B. 82, t. 39, f. 1, 2, 1795.

  Q. Papilio Medon, Esp. S. i. 330, t. 32, Sup. 8, f. 1, 1778?
- POLYOMMATUS SALMACIS. The Dark Argus.
   Polyommatus Salmacis, Step. H. iii. 235, 1831.
   Wood, I. E. t. 3, f. 72 & 12, 1832. (Var. præc.?)
- 11. POLYOMMATUS ARTAXEBERS. The Scotch Argus.

  Hesperia Artaxerxes, Fab. E. S. iii. 1, 297, 1793. West. & H.

  B. 116, t. 37, f. 4—6, 1841.

  Polyommatus Artaxerxes, Step. H. i. 95, 1828.

# Fam. V. HESPERIDÆ.

Hesperidæ, Leach, E. E. ix. 128, 1815. (Erynnis, Schr. F. B. ii. 1, 152, 1801).

#### 25. PYRGUS.

Pyrgus, Hüb. V. 109, 1816. Symmachia, Sodoff.—Bull. S. I. Mosc. 9, 1837. Syrichtus, Bois. I. M. 2 edit. 35, 1840.

Pyrgus Alveolus. The Grizzle.
 Papilio Alveolus, Hül. Pa. t. 92, f. 466, 467.
 Thymele Alveolus, Step. H. i. 97, 1828.

B. M.

Papilio Malvæ pars., Linn. S. Nat. i. 485, 1758. Papilio Malvæ minor, Esp. S. i. 345, t. 36, Sup. 12, ff. 5.

Papilio Sao, Berg. N. 67, t. 40, f. 8, 9, 1781? Hesperia Cardui, Goda. L. F. i. 240, t. 126, f. 5, 1821. Pyrgus Malvæ, West. & H. B. 120, t. 38, f. 1-6, 1841.

Pyrgus Malvæ, West. & H. B. 120, t. 38, f. 1-6, 1841. Var. a. Hesperia Lavateræ, Fab. E. S. iii. 1, 353, 1793. Papilio Althea, Bork. E. S. i. 188, 1788. Papilio Fritillum, Lew. B. B. 96, t. 46, f. 4, 5, 1795.

#### 26. NISONIADES.

Nisoniades, Hüb. V. 108, 1816. Thanaos, Bois. I. M. 2 ed. 37, 1840.

Nisoniades Tages. The Dingy Skipper.
 Papilio Tages, Linn. S. Nat. i. 485, 1758.
 Thymale Tages, Step. H. i. 98, 1828.
 Nisoniades Tages, West. & H. B. 123, t. 38, f. 9—13, 1841.

# 27. CYCLOPIDES.

Cyclopides, Hüb. V. 111, 1816. Steropes, Bois. I. M, 2 ed. 34, 1840.

CYCLOPIDES PANISCUS. The Chequered Skipper.
 Hesperia Paniscus, Fab. S. E. 531, 1775.
 Pamphila Paniscus, Step. H. i. 100, 1828. West. & H. B. 124, t. 39, f. 6-9, 1841.
 Papilio Brontes, Schiff. (W. V. 160, 1776).

#### 28. PAMPHILA.

Pamphila, Fab.—Ill. M. vi. 287, 1807. Hesperia, Bois. I. M. 2 ed. 34, 1840.

a. THYMELICUS, Hüb. V. 113, 1816. Thymelinus, West. & H. B. 125, 1841.

PAMPHILA ACTEON. The Lulworth Skipper.
 Papilio Acteon, Esp. S. i. 345, t. 36, Sup. 12, f. 4, 1778?
 Hesperia Acteon, Cur. B. E. x. t. 442, 1833.

2. Pamphila Linea. The Small Skipper.

B. M.

Papilio Linea, Schiff. (W. V. 160, 1776).

Pamphila Linea, Step. H. i. 101, 1828. West. & H. B. 129, t. 41, f. 8—12, 1841.

Papilio flavus, Müll. Z. D. Pr. 115, 1776.

Papilio Thaumus, Esp. S. i. 344, t. 36, Sup. 12, f. 2, 3, 1778?

Papilio Comma, Barb. G. 178, 1780.

b. Augiades, Hüb. V, 112, 1816.

 Pamphila Sylvanus. The Large Skipper. Hesperia Sylvanus, Fab. E. S. iii. 1, 326, 1793. B. M.

Pamphila Sylvanus, Step. H. i. 101, 1828. West. & H. B. 127, t. 40, f. 4—6, 1841. Papilio Comma, Scop. C. No. 463, 1763.

Papilio Melicerta, *Bork. E. S.* i. 285, 1788.

4. Pamphila Comma. The Pearl Skipper.

B. M.

Papilio Comma, Linn. S. Nat. i. 484, 1758.
Pamphila Comma, Step. H. i. 103, 1828. West. & H. B. 128, t. 41, f. 1—4, 1841.

# Fam. I. ZYGÆNIDÆ.

Zygwnidw, Leach, E. E. ix. 131, 1815. Anthroceridw, West. & H. M. i. 27, 1842.

## 29. PROCRIS.

Procris, Fab.—Ill. M. vi. 289, 1807. Atychia, Och. E. S. ii. 11, 1808. Ino, Leach, E. E. ix. 131, 1815. Aglaope, Dulm. Sp. S. 224, 1816.

1. PROCRIS STATICES. The Green Forester,

Sphinx Statices, Linn. S. Nat. i, 495, 1758. Ino Statices, Step. H. i. 105, 1828. Cur. B. E. ix 1832.

Sphinx Turcosa, Retz. G. 35, 1783. Var. a. Ino Globularia, Step. H. i. 106, 1828. Var. b. Sphinx Geryon, Hub. Sp. t. 28, f. 130, 131. Var. c. Sphinx micans,* Frey. N. B. i. 27, t. 14, f. 1, 1833

2. PROCEIS GLOBULARIE. The Scarce Forester.

Sphinx Globulariæ, Hüb. Sp. t. 1, f. 1, 2, 1796. E Sup. 28, t. 43, Cont. 18, 1806. Ino Globulariæ, Wood, I. E. t. 53, f. 19, 3. Sphinx Statices minor — ? Naturf. xxviii. 83, 18 1. Anthrocera Lonicera. The Large Five-spot Burnet. B. M.

Sphinx Loniceræ, Esp. S. ii. 183, t. 24, Sup. 6, f. 1, a, b, 1780?

Sphinx Graminis, Vill. E. ii. 115, 1789. Anthrocera Loti, Step. H. i. 109, 1828.

Var. a. Anthrocera Meliloti, Step. H. i. 107, 1828. Wood, I. E. ii. t. 4, f. 4, 1835. West. & H. M. i. 30, t. 8, f. 18, 1842. Var. b. Anthrocera Trifolii, Wood, I. E. ii. t. 4, f. 3, 1835.

2. ANTHROCERA TRIFOLII. The Small Five-spot Burnet. B. M.

Sphinx Trifolii, Esp. S. ii. 123, t. 34, Cont. 9, f. 4, 5, 1780? Anthrocera Trifolii, Step. H. i. 108, 1828. Anthrocera Loti, West. & H. M. i. 29, t. 6, f. 15, 16, 1842. Sphinx Pratorum, Vill. E. ii. 114, 1789.

Sphinx Triptolemus, Frey. N. B. 28, t. 14, f. 4, 1833.

Var. a. Sphinx Orobi, Hüb. Sp. t. 29, f. 133, 1796. Var. b. Sphinx Glycirrhizæ, Hüb. Sp. t. 38, f. 138, 1797.

Var. c. Zygæna Loti, Haw. L. B. 74, 1803.

3. ANTHROCERA FILIPENDULE. The Six-spotted Burnet. B. M.

Sphinx Filipendulæ, Linn. S. Nat. i. 494, 1758. Anthrocera Filipendulæ, Step. H. i. 111, 1828. Zygæna Filipendulæ, Cur. B. E. xii. t. 547, 1835.

Var. a. Sphinx Cythisi, Hub. Sp. t. 4, f. 26, 1796.

Var. b. Anthrocera Hippocrepidis, var. Step. H. i. 110, 1828.
Wood. I. E. t. 4, f. 6, 1839.

4. Anthrocera Minos. The Streaked Burnet. B. M.

Sphinx Minos, Wien. Verz. S. 45, fam. G, f. (1776), Hüb. Sp. t. 2, f. 8, Q.

Zygwna Minos, Ochs. S. E. ii. 22. Boisd. Zyg. 29, t. 1, f. 7.

Zygwna Pythia, Fabr. Mant. ii. 101. Zygwna Scabiosw, Fabr. Ent. Syst. iii. 386.

Sphinx Pilosella, Esp. S. ii. t. 24, f. 2. Borkh. E. S. ii. 25.

Sphinx Viciæ, Lang. Verz. 67.

Sphinx purpuralis, Müll. Zool. Dan. 116.

Anthrocera Minos, Newm. Zool. 4180. Stainton, Ent. Ann. 1855, p. 40, front. f. 1.

# Fam. II. SPHINGIDÆ.

Sphingidæ, Leach, E. E. ix. 130, 1815.

#### 31. SMERINTHUS.

Smerinthus, Latr. H. iii. 401, 1802. Dilina, Dalm. Sp. S. 205, 1816. Bebroptera, Sodoff.—Bull. S. I. Mosc. 10, 1837.

## a. PAONIAS, Hüb. V. 142, 1816.

SMEBINTHUS OCELLATOS. The Eyed Hawk Moth. B. M. Sphinx ocellata, Linn. S. Nat. i. 489, 1758.
 Smerinthus ocellatus, Step. H. i. 112, 1828. West. 5 H. M. i. 7, t. 1, f. 1-3, 1842.
 Sphinx semipavo, Retz. G. 34, 1783.

Sphinx Salieis, Hüb. Sp. 1, 15, f. 73, 1796.

Smerinthus hybridus,* Step. MSS. West. & H. M. i. 7, 1. 1, f. 10, 1842.

## b. Polyptychus, Hüb. V. 141, 1816.

2. SMERINTHUS POPULI. Poplar Hawk Moth.

B. M.

Sphiox Populi, Linn. S. Nat. î. 489, 1758.
Smerinthus Populi, Step. H. i. 112, 1828. West. & H. M. i. 8, t. 1, f. 4-6, 1842.

Smerinthus Tiliw, Wood, I. E. t. 3, f. 9, 1835.

. — * West, & H. M. i. 7, t. 1, f. 10, ut supra.
 Smerinthus Populi, Wing. — Tr. E. Soc. v. 119, t. 14, f. 4, 1849.

# c. MIMAS, Hub. V. 142, 1816.

5. SMERINTHUS TILIE. Lime Hawk Moth.

B. M.

Sphinx Tiliæ, Linn. S. Nat. i. 489, 1758.
Smeriuthus Tiliæ, Step. H. i. 113, 1828. West. & H. M. i. 8, t. 1, f. 7-9, 1842.

Smerinthus Populi, Wood, I. E. t. 3, f. 8, 1835. Var. a. Sphinx? Ulmi, Schune (teste Bois. I. M. 2 ed. 49, 1840).

Var. b. Engram. Pap. d'Eur. iii. t. exviii. f. 163, m, n.

#### 32. ACHERONTIA.

Acherontia, Och. S. iv. 44, 1816. Brachyglossa, Bois. (I. M. 33, 1829).

ACHERONTIA ATROPOS. The Deaths' Head.
 Sphinx Atropos, Linn. S. Nat. i. 490, 1758.
 Acheroutia Atropos, Cur. B. E. iv. t. 147, 1827. Step. H. i. 114, 1828.

#### 33. SPHINX.

Sphinx, Auct. Spectrum, Scop. I. 413, 177.

- a. AGRIUS, Hüb. V. 140, 1816.
- SPHINX CONVOLVULI. The Convolvulus Hawk Moth. B. M.
   Sphinx Convolvuli, Linn. S. Nat. i. 490, 1758. Step. H. i. 119, 1828. West. & H. M. i. 12, t. 3, f. 1—3, 1842.
  - b. Lethia, Hüb. V. 140, 1816.
- SPHINX LIGUSTEI. The Privet Hawk Moth.
   Sphinx Ligustri, Linn. S. Nat. i. 490, 1758. Step. H. i. 121, 1828. West. & H. M. i. 13, t. 3, f. 4—6, 1842.
  - c. Hyloicus, Hüb. V. 139, 1816.
- SPHINX PINASTRI. The Pine Hawk Moth.
   Sphinx Pinastri, Linn. S. Nat. 492, 1758. Step. H. i. 121, 1828. West. & H. M. i. 14, t. 3, f. 7-9, 1842.

#### 34. DEILEPHILA.

Deilephila, Och. S. iv. 42, 1816.

- a. Hyles, Hüb. V. 137, 1816.
- 1. Deilephila Euphorbiæ. The Spotted Elephant. B. M. Sphinx Euphorbiæ, Linn. S. Nat. i. 792, 1758.

Deilephila Euphorbiæ, Cur. B. E. i. t. 3, 1825. Step. H. i. 124, 1828.

- Deilephila Galii. The Galium Hawk Moth.
   Sphinx Galii, Schiff. (W. V. 42, 1776).
   Deilephila Galii, Step. H. i. 125, 1828. West. & H. M. i. 18, t. 4, f. 4, 5, 1842.
   Sphinx Gallii, Fab. G. M. 273, 1776.
  - b. Phryxus, Hüb. V. 137, 1816.
- Deilephila Livornica. The Striped Hawk Moth.
   Sphinx Livornica, Esp. S. ii. 87, 196, t. 8, f. 4, 1780?
   Sup. 41, t. 46, Cont. 21, f. 4—7, 1806.
   Sphinx Koechlini, Fues. A. i. t. 4, 1781.
   Sphinx lineata, Fab. M. I. 96, 1787.
   Deilephila lineata, Step. H. i. 126, t. 12, f. 1, 1828.

#### 35. CHŒROCAMPA.

Chœrocampa, Dup. L. F., Sup. ii. 159, 1835. Metopsilus, Dunc. B. M. 154, 1836.

- a. Hippotion, Hüb. V. 135, 1816.
- CHŒBOCAMPA CELERIO. The Silver-striped Hawk Moth. B. M. Sphinx Celerio, Linn. S. Nat. i. 491, 1758. Don. B. I. vi. 25, t. 190, 191, 1797.
   Deilephila Celerio, Step. H. i. 128, 1828.
   Sphinx inquilinus, Harr. Ex. 93, t. 28, f. 1, 1776.
  - b. THERETRA, Hüb. V. 135, 1816.
- 2. CHEROCAMPA PORCELLUS. The Small Elephant. B. M. Sphinx Porcellus, Linn. S. Nat. i. 492, 1758.
  Deilephila Porcellus, Step. H. i. 171, 1828.
  Chærocampa Porcellus, West. & H. M. i. 23, t. 5, f. 9, 10, 1842.
  - c. OREUS, Hüb. V. 136, 1816.
- 3. CHEROCAMPA ELPENOR. The Elephant. B. M. Sphinx Elpenor, Linn. S. Nat. i. 491, 1758.

Deilephila Elpenor, Step. H. i. 131, 1828. Chœrocampa Elpenor, West. & H. M. i. 22, t. 51, f. 7, 8, 1842.

#### 36. DAPHNIS.

Daphnis, Hüb. V. 134, 1816. Metopsilus, p., Dunc. B. M. 154, 1836.

 DAPHNIS NERII.* The Oleander Hawk Moth. Sphinx Nerii, Linn. S. Nat. i. 490, 1758.
 Deilephila Nerii, Step. H. iv. 1834.
 Chœrocampa Nerii, Cur. B. E. xiii. t. 626, 1837.

## Fam. III. SESIIDÆ.

Sesiidæ, Step. H. i. 132, 1828.

#### 37. MACROGLOSSA.

Macroglossum, Scop. I. 414, 1777. Psithyros, Hüb. V. 132, 1816.

MACROGLOSSA STELLATABUM. The Humming Bird. B. M. Sphinx Stellatarum, Linn. S. Nat. i. 493, 1758.
 Macroglossa Stellatarum, Step. H. i. 133, 1828. Cur. B. E. xvi. t. 747, 1839.

#### 38. SESIA.

Sesia, Fab. S. E. 547, 1775. Hemaris, Dalm. Sp. S. 215, 1816, 1. Cephanodes, Hüb. V. 131, 1816, 9.

Sesia Fuciformis. The Broad-bordered Bee Hawk Moth. B. M. Sphinx Fuciformis, *Linn. S. Nat.* i. 493, 1758.
 Sesia Fuciformis, *West. & H. M.* i. 26, t. 6, f. 7, 1842.
 Sesia Bombyliformis, *Och. S.* ii. 189, 1808. *Step. H.* i. 135, 1829.

(B. M.

2. Sesia Bombyliformis. The Narrow-bordered Bee Hawk Moth.

Sphinx Bombyliformis, Esp. S. ii. 180, t. 23, Sup. 5, f. 2. 1780 ?

Sesia Bombyliformis, Cur. B. E. i. t. 40, 1824.

Sphinx Fuciformis, Schiff. (W. V. 44, 1776). Step. H. i. 134, 1829.

## Fam. IV. ÆGERIIDÆ.

Egeriidæ, Step. H. i. 136, 1828. Trochilide, West. & H. M. i. 32, 1842.

#### 39. SPHECIA.

Sphecia, Hüb. V. 127, 1816. Trochilium, Step. H. i. 137, 1828.

I. SPHECIA APIFORMIS. The Hornet Moth.

B. M.

Sphinx Apiformis, Linn. F. ii. No. 1093, 1767.

Trochilium Apiforme, Step. H. i. 137, 1828. Cur. B. E. viii. t. 372, f. **, 1831.

Sphinx Crabroniformis, Schiff. (W. V. 44, 1776).

Var. a. Sphinx Sireciformis, Esp. S. ii. 208, t. 29, Cont. 4, f. 4, 5, 1780 P

Sphinx Tenebrioniformis, Hüb. Sp. t. 8, f. 54, 1796.

Var. b. Sphinx Tenebrioniformis, Esp. S. ii. 209, t. 30, Cont. 4. f. 1, 1780?

2. Sphecia Bembeciformis. The Lunar Hornet Moth. B. M.

Sphinx Bembeciformis, Hüb. Sp. t. 20, f. 98, 1796,

Trochilium Bembeciforme, Cur. B. E. viii. t. 372, f. . 1831. Step. H. iv. 384, 1836.

Sphinx Crabroniformis, Lew.-Linn. Tr. iii. 23, t. 3, f. 1-5, 1797.

Trochilium Crabroniforme, Step. H. i. 137, 1828.

#### 40. TROCHILIUM.

Trochilium, Scop. I. 414, 1777. Ægeria, Step. H. i. 138, 1828.

- PARANTHRENE, Hüb. V. 128, 1816.
   Memythrus, Newm.—Ent. Mag. i. 85, 1832.
- 1. TROCHILIUM VESPIFORME. The Clear Underwing.

  Sphinx Vespiformis, Linn. F. ii. No. 1095, 1761.

  Trochilium Vespiforme, West. & H. M. i. 37, t. 7, f. 3, 1842.

  Sphinx Asiliformis, Schiff. (W. V. 305, 1776).

  Egeria Asiliformis, Step. H. i. 139, 1828.

  Egeria Œstriformis, Kir. & Sp. I. i. t. 3, f. 2, 1828.

  Var. a. Sphinx Tabaniformis, Bork. E. S. ii. 45, 1789.

## b. Bembecia, Hüb. V. 128, 1816.

[B. M.

2. TROCHILIUM ICHNEUMONIFORME. The Six-belted Clearwing. Sphinx Ichneumoniformis, Schiff. (W. V. 44, 1776). Egeria Ichneumoniformis, Cur. B. E. ii. t. 53, 1824. Step. H. i. 140, 1828.

Sphinx Vespiformis, Esp. S. ii. 129, t. 15, f. 2, 1779. Sphinx Scopigera, Scop. ? C. No. 477, 1763.

- Var. a. Trochilium Muscæforme, Newm.—Ent. Mag. i. 79, 1833. S. iv. 385, 1835.
  - c. Synanthedon, Hüb. V. 129, 1816.

[B. M.

- 3. TROCHILIUM CYNIPIFORME. The Yellow-legged Clearwing. Sesia Cynipiformis, Och. S. ii. 151, 1808. Egeria Cynipiformis, Step. H. i. 141, 1828. Wood, I. E. 14, t. 4, f. 29, \$\( \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi, \rightarrow \chi
- 3. Sphinx Vespiformis, Schiff. (W. V. 44, 1776).
  Sphinx Asiliformis, Bork.—Naturf. vii. 108, 1779?
  Sphinx Cynipiformis, Esp. S. ii. 214, t. 31, Cont. vi. f. 3, 4, 1780?
  - Sphinx Tenthrediniformis, Haw. (Pr. 6, 1802).
- Q. Sphinx Tipuliformis, Berk. O. i. 138, 1769.

Sphinx (Estriformis, Fues. Ent. M. i. 117, 1778. Esp. S. ii. 181, t. xxiii., Sup. v. f. 3, 1780? Sphinx Chrysorrhea, Don. B. I. iv. 13, t. 116, 1795.

# d. TROCHILIUM, Scop. I. 414, 1777.

- TROCHILLIUM CHRYSIDIFORME.* The Fiery Clearwing.
   Splinx Chrysidiformis, Esp. S. ii. 210, t. 30, Cont. 5, f. 2, 1780?
   Trochilium chrysidiforme, West. & H. M. i. 36, t. 7, f. 4, 1842.
   Sphinx hæmorrhoidalis, Cyrilli, E. N. i. t. 4, f. 3, 1787.
   Sesia Crabroniformis, Fabr. E. S. iii. 1, 383, 1795.
   Sphinx bicinetus, Haw. Pr. 6, 1802.
- 5. TROCHILIUM SCOLLEFORME.* The Large Clearwing.

  Sphinx Scolieformis, Borkh. E. S. ii. 173, t. f. 2, 3. Hüb. S. t. 23, f. 111.

  Sesia Scolieformis, Lasp. Ses. Eur. 13, t. f. 1, 2.
- 6. TROCHILIUM SPHEGIFORME.* The Black and White Horned Clearwing, B. M.

Trochilium Scoliæforme, Newm.-Zool. 1855.

Sesia Sphægiformis, Fab. M. ii. 99, 1787.
Trochilium Sphægiforme, West. & H. M. i. 40, t. 7, f. 5, 1842.
Sphinx Spheciformis, Schiff. (W. V. 306, 1776).
Ægeria Spheciformis, Step. H. i. 140, 1828.
Sphinx Ichneumoniformis, Bork. E. S. ii. 131, 1789.
Sphinx semizonatus, Haw. (Pr. 6, 1802).

TROCHILIUM ALLANIIFORME.* The White-belted Clearwing.
Trochilium Allaniforme, Newm.—Ent. Mag. i. 79, 1833. Step.
H. iv. 385, 1835.
Sesia Andreniformis, Lasp. ? S. 20, f. 7, 8, 1801.
Trochilium Andreniforme, West. & H. M. i. 40, t. 7, f. 5, 1842.

8. TROCHILIUM TIPULIFORME. The Currant Hawk Moth. B. M. Sphinx Tipuliformis, Linn. F. ii. No. 1090, 1761.

Ægeria Tipuliformis, Supp. H. i. 142, 1828.

Trochilium Tipuliforme, West. & H. M. i. 39, t. 7, f. 9, 1842.

## e. Conopia, Hüb. V. 129, 1816.

- 9. TROCHILIUM MYOPÆFORME. The Red-belted Clearwing. B. M. Sphinx Myopæformis, Bork. E. S. ii. 167, 1789.
  Trochilium Myopæforme, West. & H. M. i. 42, t. 7, f. 11, 1842.
  Sphinx Culiciformis, var., Esp. S. ii. 215, t. 15, f. 5, 6, 1780? Sphinx zonatus, Don. B. I. vi. 35, 1797.
  Sesia Mutillæformis, Lasp. S. 26, f. 15—17, 1801.
- Trochilium Mutillæforme, Step. H. i. 142, 1828. Var. a. Trochilium Stomoxyforme, Step. H. i. 144, t. 11, f. 4, 1828.
- 10. Trochilium Culiciforme. The Large Red-belt. B. M. Sphinx Culiciformis, Linn. S. Nat. ii. 493, 1758.

  Ægeria Culiciformis, Step. H. i. 143, 1828.

  Trochilium Culiciforme, West. & H. M. i. 41, t. 7, f. 12, 1842.
- [B. M. TROCHILIUM FORMICÆFORME. The Flame-tipped Red-belt. Sphinx Formicæformis, Esp. S. ii. 216, t. 32, Cont. 7, f. 3, 4, 1780?

  Ægeria Formiciformis, Step. H. i. 144, 1828.
  - Argena Formiciforms, Step. H. 1. 144, 1828.

    Trochilium Formiciforme, West. & H. M. i. 41, t. 7, f. 14, 1842.

    Sphinx Formiciformis, Vill. E. ii. 104, 1789.
  - Sphinx flammeus, Haw. (Pr. 6, 1802).
- 3. Sphinx Nomadæformis, Hüb. Sp. t. 19, f. 90, 1796.
- Sphinx Tentrediniformis, Esp. S. ii. 211, t. 30, Cont. 5, f. 2, 1780?

# Div. II. LEPIDOPTERA NOCTURNA.

Lepidoptera Nocturna, Latr. G. iv. 216, 1809.

# Sub-Div. I. LEPIDOPTERA POMERIDIANA.

Lepidoptera Pomeridiana, Step. H. ii. 2, 1828.

# Fam. I. HEPIALIDÆ.

Hepialidæ, Step. H. ii. 3, 1828.

#### 41. HEPIALUS.

Hepialus, Fab. S. E. 589, 1775, Hepialus, Ill. (M. i. 138, 1801).

# 8. GAZORYCTBA, Hub. V. 198, 1816.

I. HEPIALUS HECTUS. The Gold Swift.

B. M.

Phalæna-B. Hecta, Lina. F. ii. No. 1148, 1761. Hepialus Hectus, Step. H. ii. 4, 1828. West. & H. M. i. 45, t. 8, f. 1, 2, 1842. Bombyx lupulina, Hüb. B. i. 27, 1787.

var. Noctua nemorosa, Esp. S. iv. 30, t. 81, Noct. 2, f. 5, 1786.
 var. Noctua Joduta, Esp. S. iv. 30, t. 81, Noct. 2, f. 6, 1786.

2. HEPIALUS LUPULINUS. The Common Small Swift, B. M.

Phalana-B. lupulina, Linn. S. Nat. i. 508, 1758. Hepialus lupulinus, Step. H. ii. 5, 1828. West. & H. M. i. 45, t. 8, f. 3-5, 1842.

Phalama-B. Flina, Schiff. (W. V. 61, 1776). Phalama hecta, Harr. Aur. 74, t. 22, f. 1, 1778. Hepjalus lupulator, Haw. (Pr. 19, 1802).

Hepialus obliquus, Fab. S. E. iii. 2, 6, 1794.
 Hepialus Cora, Schr. F. B. ii. 1, 304, 1801.

Hepialus lupulinus, Fab. Sp. ii. 207, 1781.
 Hepialus fuscus, Haw. L. B. 141, 1810.

Var. a. Hepialus augulum, Haw. L. B. 142, 1810. Var. b. Hepialus obliquus, Haw. L. B. 142, 1810. Var. c. Hepialus nebulosus, Haw. L. B. 143, 1810.

#### b. Gorgopis, Hüb. V. 198, 1816.

3. Hepialus Humuli. The Ghost.

B. M.

Phalæna-B. Humuli, Linn. S. Nat. i. 508, 1758. Hepialus Humuli, Step. H. ii. 6, 1828. West. & H. M. i. 45, t. 8, f. 7—9, 1842. Hepialus Humulator, Haw. (Pr. 19, 1802).

c. Pharmacis, Hüb. V. 198, 1816.

4. HRPIALUS VELLEDA. The Beautiful Swift.

B. M.

Bombyx Velleda, Hüb. B. t. 50, f. 212, 1798? Hepialus Velleda, Step. H. ii. 6, 1828. Phalæna Mappa, Don. B. I. x. 95, t. 36, f. 3, 1801. Pharmacis Flina, Hüb. (V. 199, 1816). Var. a. Hepialus carnus, Step. H. ii. 7, t. 13, f. 1, 1828.

#### d. TRIODIA, Hüb. V. 198, 1816.

5. HEPIALUS SYLVINUS. The Orange Swift.

B. M.

Phalana-B. sylvina, *Linn. F.* ii. No. 1151, 1761. Hepialus sylvinus, *Cur. B. E.* iv. t. 185, 1827. *Step. H.* ii. 7, 1828.

Bombyx lupulina, Hüb. B. t. 48, f. 205, 206.

Hepialus Crux, Fab. M. ii. 135, 1787.
 Hepialus angulatus, Fab. Sp. I. ii. 506, 1781.

Var. a. Noctua Flina, Esp. S. iv. 35, t. 82, Noct. 3, f. 5-7, 1786. Hepialus Fauna, Schr. F. B. ii. 1, 305, 1801.

Var. b. Hepialus Hamma, Schr. F. B. ii. 1, 302, 1801.

#### 42. ZEUZERA.

Zeuzera, Lat. H. xiv. 175, 1802. Latagia, Hüb. V. 196, 1816.

1. ZEUZERA ÆSCULI. The Wood Leopard.

B. M.

Phalma-B. Æsculi, Linn. S. Nat. ii. 833, 1767. Step. H. ii. 8, 1828.

Zeuzera Æsculi, Cur. B. E. xvi. t. 722, 1839. Phalæna-N. Pyrina, Linn. F. ii. No. 1150, 1761.

#### 43. PHRAGMATÆCIA.

Phragmatæcia, Newm.—Zool. viii. 2931, 1850.

Macrogaster, Dup. C. 81, 1846. (Genus Coleopt., Thunb. 1792). Step. C. L. B. 6, 1850.

Zeuzera, Hüb. V. 196, 1816.

Phragmatæcia Arundinis. The Reed Leopard.
 Bombyx Arundinis, Hüb. B. t. 40, f. 200, 201.
 Zeuzera Arundinis, Step.—Entom. 160, 1841. West. & H. M. i. 49, t. 9, f. 7, 8, 1842.
 Bombyx castanea, Esp. S. iii., Sup. 97, t. 94, Cont. 25, f. 1, 2, 1808.

#### 44. COSSUS.

Cossus, Fab. E. S. iii. 2, 4, 1794. Xyleutes, Hüb. V. 195, 1816.

Cossus Ligniperda, Fab. E. S. iii. 2, 4, 1794. Step. H. i. 9, 1828. Cur. B. E. ii. t. 60, 1825.
 Bombyx Cossus, Linn. S. Nat. i, 504, 1758.

# Fam. II. NOTODONTIDÆ.

Notodontidæ, Step. H. ii. 10, 1828.

# Sub-F. I. PYGERIDI.

Pygeridi, Step. MSS. Pygæridæ, Dup. C. 95, 1846.

## 45. PHALERA.

Phalera, Hüb. V. 146, 1816. Pygæra, p., Och. E. S. iii. 224, 1810. Sericaria, p., Lat. F. N. 474, 1825. Acrosema, Meig. E. S. iii. 24, 1832. Hammatophora, West. & H. M. i. 63, 1842.

#### PHALERA BUCEPHALA. The Buff-tip.

B. M.

Phalæna-B. bucephala, *Linn. S. Nat.* i. 58, 1758. Pygæra bucephala, *Step. H.* ii. 12, 1828. *Cur. B. E.* xii. t. 530, 1835. Phalæna lunata, *Retz. G.* 38, 1783.

#### 46. CLOSTERA.

Clostera, Hoff. MSS.? Step. H. ii. 12, 1828. Pygæra, t., Och. E. S. iii. 224, 1810. Ichthyura, Hüb. V. 162, 1816. Sericaria, p., Lat. F. N. 474, 1825.

1. CLOSTERA RECLUSA. The Small Chocolate-tip.

B. M.

Bomby x reclusa, Schiff. (W. V. 56, 1776). Clostera reclusa, Step. H. ii. 13, 1828. West. & H. M. i. 64, t. 13, f. 6, 7, 1842.

Phalæna anastomosis, Scop. ? E. C. No. 502, 1763. Don. B. I. iv. 33, t. 124, &, 43, t. 129, f. 4, Q, 1795.

- Var. a. Clostera reclusa, var. Step. H. ii. 13, t. 16, f. 1, 1828. Clostera suffusa, Step. H. iv. 385, 1835.
- CLOSTERA ANACHORETA.* The Scarce Chocolate-tip. B. M. Bombyx Anachoreta, Schiff. (W. V. 56, 1776).
   Clostera Anachoreta, Step. H. ii. 13, 1828. Cur. B. E. xv. t. 715, 1838.
   Bombyx curtula, Esp. S. iii. 256, t. 51, f. 1-4, 1784.
- CLOSTERA CURTULA. The Chocolate-tip.
   Phalsena-B. curtula, Linn. S. Nat. i. 503, 1758.
   Clostera curtula, Step. H. ii. 14, 1828. West. & H. M. i. 65, t. 13, f. 10 & 10, 1842.

Sub-F. II. DICRANURIDI.

# Bombyx Anachoreta, Esp. S. iii. 260, t. 51, f. 58, 1784.

Dicranuridi, Step. MSS. Dicranuridæ, Dup. C. 86, 1846.

## 47. CERURA.

Cerura, Schr. F. B. ii. 2, 155, 1802. Harpyia, Och. (E. S. iii. 19, 1810). Furcula, Lama. I. iii. 581, 1816. Pania, Dalm. Anal. Ent. 92, 1823. Dicranura, Latr. F. N. 473, 1825.

#### a. HARPYIAS, Hub. V. 148, 1816.

I. CERURA BIGUSPIS.* The Dark-barred Kitten.

Phalæna-B. bicuspis, Bork. E. S. iii. 380, 1790. Bombyx bicuspis, Hilb. Bo. t. 10, f. 36, 1796. Cerura bicuspis, West. & H. M. i. t. 15, f. 2, 1842. Cerura furcula, var. Bois. I. M. 54, 1829.

2. CERURA FURCULA. The Kitten.

B. M.

Phalæna-B. furcula, Linn. F. ii. No. 1122, 1761. Cerura furcula, Step. H. ii. 17, 1828. West. & H. M. i. 74, t. 15, f. 4, 5, 1842.

Furcula Salicis, Lama. I. iii. 582, 1816.

Var. a. Cerura bicuspis, Step. H. ii. 16, t. 13, f. 3, 1828, 10. Cerura emarginata, Step. MSS. Aber.? Cerura integra, Step. H. ii. 16, t. 15, f. 3, 1828, 10.

3. CERURA BIFIDA. The Barred Kitten.

B. M.

Bombyx bifida, Hüb. Bo. t. 10, f. 38, 1796. Cerura bifida, Step. H. ii. 19, t. 15, f. 2, 1828. West. & H. M. i. 77, t. 15, f. 8, 9, 1842.

Cerura furcula, var. Bois. I. M. 54, 1829. Bombyx furcula, Esp. S. iii. 102, t. 19, f. 3—7, 1782.

Var. a. Cerura latifasciu, Cur. B. E. iv. t. 193, 1827. Step. H. ii. 18, 1828.

Cerura bidens, Step. MSS. olim.

Var. b. Cerura arcuata, Step. H. ii. 17, 1828, 11.

Var. c. Cerura forficula, Zett. ³ teste Fisch, E. R. i, 62, 1820. Var. d. Cerura fuscinula, Step. H. ii. 18, t. 15, f. 1, 1828, 11.

## b. HARPYIA, Hub. V. 148, 1816.

4. CERURA VINULA. The Puss Moth.

B. M.

Phalana-B. Vinula, Linn. S. Nat. i. 499, 1758.

Cerura Vinula, Step. H. ii. 19, 1828. West. & H. M. i. 77, t. 15, f. 12, 13, 1842. Var. a. Bombyx minax, Hüb. Bo. t. 56, f. 243, 1802?

### 48. STAUROPUS.

Stauropus, Germ. Pr. 45, 1811. Terasion, Hüb. V. 147, 1816. Harpyia, Bois. (I. M. 54, 1829).

1. STAUROPUS FAGI. The Lobster Moth.

B. M.

Phalæna-B. Fagi, Linn. S. Nat. i. 508, 1758, Stauropus Fagi, Step. H. ii. 21, 1828. Cur. B. E. xv. t. 674, 1838.

## Sub-F. HI. NOTODONTIDI.

Notedontidi, Step. MSS. Notedontidæ, Dup. C. 89, 1846.

#### 49. NOTODONTA.

Notodonta, Auct.

1. Notodonta dromedarius. The Iron Prominent. B. M. Phalma-B. dromedarius, Linn. S. Nat. ii. 827, 1776. Notodonta dromedarius, Step. H. ii. 22, 1828. Cur. B. E. xvi. t. 739, 1839.

Var. a. Bombyx dremedarulus, Haw. (Pr. 8, 1802).
Phalæna Zebu, Don. B. I. xii. 1, t. 397, f. 1, 1807.
Var. b. Notodonta perfusca, Step. H. ii. 23, t. 14, f. 2, 1828.
Notodonta torva, Ing. (Inst. 91, 1827).

2. Notodonta Tritophus.* The Dark Iron Prominent, Bombyx Tritophus, Schiff. (W. V. 63, 1766), Bombyx Tremulæ, Brahm. (I. K. 259, 1790), Bombyx torva, Hüb. Bo. t. 7, f. 27, 1797, Bombyx perfuscus, Haw. ? L. B. 100, 1803, var.?

Notodonta ziczac. The Pebble Prominent.
 Phalæna-B. ziczac, Linn. S. Nat. i. 504, 1758.
 Notodonta ziczac, Step. H. ii. 23, 1828. West. & H. M. i. 66, t. 13, f. 15, 16, 1842.

## 50. PHEOSIA.

Pheosia, Hilb. V. 145, 1816. Leiocampa, Step. B. ii. 10, 1828.

1. Pheosia Dictea. The Swallow Prominent.

B. M.

Phalæna-B. dictæa, Linn. S. Nat. ii. 826, 1766. Leiocampa dictæa, Step. H. ii. 25, 1828. West. & H. M. i. 67, t. 13, f. 16, 17, 1842. Phalæna-B. Tremulæ, Linn. F. ii. No. 1121, 1761. Phalæna-B. porcellanea, Hūfn.—Berl. M. iii. 420, 1769 ? Phalæna trepida? Don. B. I. vii. 63, t. 209, f. 1, 1769.

PHEOSLA DICTEOIDES. The Lesser Swallow Prominent. B. M.
Bombyx dicteoides, Esp. S. iii., Sup. 27, t. 84, Cont. 5, f. 2, 3, 1787?
Leiocampa dicteoides, Step. H. ii. 26, 1828. West. & H. M.
i. 67, t. 13, f. 18, 19, 1842.
Bombyx gnoma, Fab. M. ii. 122, 1787.

## 51. LOPHOPTERYX.

Lophopteryx, Step. H. ii. 10, 1828. Odontosia, p., Hub. V. 145, 1816.

1. LOPHOPTERYX CAMELINA. The Coxcomb Prominent. B. M. Phalæna-B. camelina, *Linn. S. Nat.* i. 507, 1758. Lophopteryx camelina, *Step. H.* ii. 26, 1828. *West. & H. M.* i. 68, t. 14, f. 1, 2, 1842. Var. a. Phalæna-B. capuzina, *Linn. S. Nat.* i. 507, 1758.

Var. a. Phalæna-B. capuzina, Linn. S. Nat. i. 507, 1758 Aber.? Bombyx Giraffina,* Hüb. Bo. t. 66, f. 277, 278.

- LOPHOPTERYX CUCULLINA. The Maple Prominent.
   Bombyx cucullina, Schiff. (W. V. 311, 1776).
   Lophopteryx cucullina, West. & H. M. i. 69, t. 14, f. 3, 4, 1842.
   Bombyx cuculla, Esp. S. iii. 364, t. 72, f. 1, 1785.
   Lophopteryx cuculla, Step. H. ii. 27, 1828.
- 3. LOPHOPTERYX CARMELITA. The Scarce Prominent. B. M. Bombyx carmelita, Esp. S. iii., Sup. 65, t. 91, Cont. 1, f. 1, 1807.

B. M.

Lophopteryx carmelita, Step. H. ii. 27, t. 14, f. 3, 1828. Bombyx capuzina, Hüb. Bo. t. 5, f. 21, 1797.

#### 52. PTEROSTOMA.

Pterostoma, Germ. Pr. 43, 1811. Odontosia, t., Hiib. V. 145, 1816. Ptilodontis, Step. H. ii. 10, 1828, Orthorhinia, Bois. (I. M. 56, 1829).

PTEROSTOMA PALPINA. The Pale Prominent.
 Phalæna-B. palpina, Linn. F. ii. No. 1146, 1761.

Phenostoma palpina, Step. H. ii. 28, 1828. West. & H. M. i. 70, t. 14, f. 6, 1842.

Pterostoma Salicis, Germ. Pr. 43, 1811.

## 53. PTILOPHORA.

Ptilophora, Step. H. ii. 11, 1828. Odontosia, p., Hüb. V. 145, 1816.

1. PTILOPHORA PLUMIGERA. The Plumed Prominent. B. M. Bombyx plumigera, Schiff. (W. V. 61, 1776).

Ptilophora plumigera, West. & H. M. i. 73, t. 14, f. 18, 19,

1842. Phalana variegata, Vill. E. ii. 164, 1789. Ptilophora Aceris, Step. MSS. olim.

Ptilophora variegata, Step. H. ii. 29, t. 14, f. 1, 1828.

## 54. DRYMONIA.

Drymonia, Hüb. V. 144, 1816. Chaonia, Step. H. ii. 10, 1828. Dimorpha, Cur. (G. 2 ed 176, 1837).

1. DRYMONIA CHAONIA. The Lunar Marbled Brown. B. M.

Bombyx Chaonia, Schiff. (W. V. 49, 1776).
Drymonia Chaonia, West. & H. M. i. 72, t. 14, f. 13, 14, 1842.
Phalæna confusa, Hüfn.?—(Berl. M. iii. 4, 1769).
Noctua Roboris, Fab. G. M. 283, 1777.
Chaonia Roboris, Step. H. ii, 30, 1828.

# Gluphisia, Bois. (I. M. 56, 1829).

1. GLUPHISIA CRENATA.* The Dusky Marbled Brown.

Bombyx crenata, Esp. S. iii. 245, t. 47, f. 3, 4, 1784. Gluphisia crenata, West. & H. M. i. 73, t. 14, f. 15, 18 Bombyx crenosa, Hüb. Bo. t. 4, f. 12, 1796.

#### 56. DILOBA.

Diloba, Bois, I. M. 2 ed. 88, 1840. Episema, t., Och. (E. S. iv. 65, 1816, 3). Disphragis, p., Hilb. V. 194, 1816, 9.

DILOBA CÆRCLEOCEPHALA. The Figure-of-Eight Moth.
 Phalæna-B. cæruleocephala, Linn. S. Nat. i. 504, 173
 Episema cæruleocephala, Step. H. ii. 15, 1828.
 Disphragis cæruleocephala, West. & H. M. i. 80, t. 1
 1842.

#### 57. PETASIA.

Petasia, Step. H. ii. 11, 1828. Brachionycha, p., Hüb. V. 114, 1816. Asteroscopus, Bois. (I. M. 59, 1829). Brachionyx, Meig. E. S. iii. 178, 1832.

 Petasia Cassinea. The Sprawler. Bombyx Cassinea, Schiff. (W. V. 61, 1776) Petasia nubeculosa. The Rannoch Sprawler.
 Bombyx nubeculosa, Esp. Schm. iii. t. 48, f. 6 (1782).

## 58. PERIDEA.

Peridea, Step. H. ii. 11, 1828.

Peridea Trepida. The Great Prominent.
 Bombyx trepida, Fab. M. ii. 121, 1787.
 Peridea trepida, West. & H. M. i. 71, t. 14, f. 9, 10, 1842.
 Bombyx Tremulæ, Schiff. (W. V. 49, 1776).
 Phalæna-B. serrata, Thunb. I. S. 47, 1792.
 Peridea serrata, Step. H. ii. 33, 1828.
 Phalæna tritopha, Don. B. I. x. 91, t. 359, 1801.

# Sub-F. IV. ENDROMIDI.

Endromidi, Step. MSS. Endromidæ, Dup. C. 79, 1846.

#### 59. ENDROMIS.

Endromis, Och. E. S. iii. 15, 1810, 6. Dorvillia, Leach (E. E. ix. 132, 1815). Bombyx, Sodoff.—Bull. S. I. Mosc. ii. 1837.

1. Endromis versicolor. The Kentish Glory. B. M. Phalæna-B. versicolora, Linn. S. Nat. i. 499, 1758. Phalæna versicolor, Neale.—Ent. Tr. i. 323, t. 9, \$, \$, 1813. Endromis versicolor, Step. H. ii. 34, 1828.

## Fam. III. BOMBYCIDÆ.

Bombycidæ, Step. H. ii. 3, 1828.

## Sub-F. I. ATTACIDI.

Attacidi, *Step. MSS*. Attacidæ, *Dup. C.* 78, 1846. Saturnides, *Bois. I. M.* 2 ed. 73, 1840.

#### 60. SATURNIA.

Saturnia, Schr. F. B. ii. 2, 149, 1802. Attacus, Germ. Pr. 9, 1811. Pavonia, Hüb. V. 157, 1816.

1. SATURNIA PAVONIA-MINOR. The Emperor Moth.

B.M.

Phalæna-B. Pavonia-minor, Linn. S. Nat. i. 497, 1758.
Saturnia Pavonia-minor, Step. H. ii. 37, 1828. West. 4 H.
M. i. 51, t. 10, f. 1, 2, 1842.
Phalæna B. Pavonia, var. minor, Linn. F. ii. No. 1099, 1761.
Phalæna Pavoniella, Scop. C. No. 483, 1763.
Bombyx Carpini, Schiff. (W. V. 50, 1776).
Phalæna Pavunculus, Retz. G. 35, 1783.

# Sub-F. II. BOMBYCIDI.

Bombycidi, Step. MSS. Bombyx, Bois. (I. M. 48, 1829). Bombicini, Bois. I. M. 2 ed. 69, 1840. Bombycidæ, Dup. C. 74, 1846.

## 61. LASTOCAMPA.

Lasiocampa, Schr. F. B. ii. 2, 153, 1802. Bombyx, Dup. C. 77, 1846.

a. METANASTRIA, Hub. V. 186, 1816.

1. LASIOCAMPA RUBI. The Fox Moth.

B. M.

Phalæna-B. Rubi, Linn. S. Nat. i. 498, 1758.
Lasiocampa Rubi, Step. H. ii. 39, 1828. West. & H. M. i. 57, t. 11, f. 1—4, 1842.
Bombyx Trifolii, Pz.—Schæff. Ic. 159, 1804.

b. PACHYGASTRIA, Hüb. V. 186, 1816.

2. LASIOCAMPA TRIFOLII. The Grass Eggar.

B. M.

Bombyx Trifolii, Schiff. (W. V. 57, 1776). Lasiocampa Trifolii, Step. H. ii. 40, 1828. West. 3 H. M. i. 58, t. 11, f. 5-7, 1842. Bombyx Dumeti, Fues. S. I. 34, 1775.

Var. a. Phalana-B. Medicaginis, Bork .- Rhen. M. i. 363, 1793.

Lasiocampa Medicaginis, Cur. B. E. iv. t. 181, 1827. Step.
 H. ii. 41, 1828.
 Bombyx Trifolii, Pz. F. G. xix. f. 23, 1794.

Phalæna Quereus, Wilkes, B. M. t. 23, 1794.

3. LASIOCAMPA QUERCUS. The Oak Eggar.

Phalæna-B. Quercus, Linn. F. ii. No. 1106, 1761. Linn. P. S. Nat. i. 498, 1758.

Lasiocampa Quercus, Step. H. ii, 40, 1828. West. & H. M. i. 58, t. 11, f. 13, 1842.

Var. a. Bombyx Roboris, Schr. F. B. ii. 1, 275, 1801.

Lasiocampa Roboris, Step. H. ii. 41, 1828. West. & H. M. i. 58, t. 11, f. 8-12.

Bombyx Quercus, Esp. S. iii. 81, t. 14, f. 1, 2, 1782. Var. b. Lasiocampa Callune, Palmer.—Zool. 1656, 1847, 3.

Var. c. Bombyx Spartii? Hub. Bo. t. 39, f. 173.

Var. d. Lasiocampa Quercus,* var., West. & H. M. i. 58, t. 11, f. 9,

#### 62. ERIOGASTER.

Eriogaster, Germ. Pr. 16, 1811. Dasysoma, Hüb, V. 185, 1816.

1. ERIOGASTER LANESTRIS. The Small Eggar. B. M.

Phalwna-B. lanestris, Linn. S. Nat. i. 499, 1758. Eriogaster lauestris, Step. H. ii. 45, 1828. West. 4 H. M. i. 54, t. 10, f. 3, 4, 1842.

# 63. PŒCILOCAMPA.

Pœcilocampa, Step. H. ii. 36, 1828. Diaphone, p., Hub. V. 188, 1816.

1. PECILOCAMPA POPULI. The December Moth. B. M.

Phalana-B. Populi, Linn. S. Nat. i. 502, 1758. Pecilocampa Populi, Step. H. ii. 44, 1828. West. & H. M. i. 54, t. 10, f. 7, 8, 1842.

# 64. TRICHIURA.

Trichiura, Step. H. ii. 36, 1828. Diaphone, p., Hüb. V. 188, 1816. 1. TRICHIURA CRATEGI. The Pale Oak Eggar.

B. M.

Phalæna B. Cratægi, Linn. S. Nat. i. 502, 1758. Trichiura Cratægi, Step. H. ii. 43, 1828. West, & H. M. i. 36, t. 10, f. 13, 14, 1842.

Phalma albicaudata, Retz. G. 36, 1783. Bombyx Mali, Fab. M. ii. 115, 1787.

Q. Phalena-B. Vitis-Idee, Linn. F. ii. No. 1163, 1761. Var. a. Bombyx Avellane, Fab. M. ii. 116, 1787.

Var. b. Bombyx pallidus, Haw. L. B. 105, 1803.

## 65, CLISIOCAMPA.

Clisiocampa, Cur. B. E. v. t. 229, 1829. Malacosoma, p., Hub. V. 192, 1816.

1. CLISIOCAMPA CASTRENSIS. The Ground Lackey.

B. M.

Phalæna-B. Castrensis, Linn. S. Nat. i. 500, 1758. Clisiocampa Castrensis, Cur. B. E. v. t. 229, 1828, 9. Step. H. ii. 48, t. 13, f. 2, 3, 1828, 12.

Phalæna-B. Neustria, B., Linn. F. ii. No. 1102, 1761. & Lasiocampa Castrensis,* Klug, Herm. t. fig. im. hermap.

2. CLISIOCAMPA NEUSTRIA. The Lackey.

B. M.

Phalana-B. Neustria, Linn. S. Nat. i. 500, 1758. Clisiocampa Neustria, Step. H. ii. 47, 1828. West. & H. M. i. 50, t. 10, f. 11, 12, 1842.

Var. a. Bombyx bilineatus, Haw. L. B. 130, 1803.

# Sub-F. III. LASIOCAMPIDI.

Lasiocampidi, Step. MSS. Lasiocampidæ, Dup. C. 71, 1846.

# 66. ODONESTIS.

Odonestis? Germ. Pr. 49, 1811. Odenesis, Sam. C. 247, 1818. Cosmotriche, Hub. V. 188, 1816.

1. ODONESTIS POTATORIA. The Drinker.

B. M

Phalæna-B Potatoria, Linn. S. Nat. i. 498, 1758. Odonestis Polatoria, Step. H. ii. 51, 1828. West. 4 H. M. i. 56, t. 10, f. 15-17, 1842.

Var. a. Odonestis palustris, Step. MSS. Engram. Pap. d'Eur. v. t. clxxii. f. 223, f. 1786.

## 67. DENDROLIMUS.

Dendrolimus, Germ. (Pr. 48, 1811). Lasiocampa, p., Hüb. V. 189, 1816. Eutricha, Step. H. ii. 36, 1828. Phylloma, Billb. (Cat. 1820).

1. DENDROLIMUS PINI. The Pine Lappet.

B. M.

Phalæna-B. Pini, *Linn. S. Nat.* i. 498, 1758. Odonestis Pini, *Cur. B. E.* i. t. 7, 1824. *Step. H.* ii. 50, 1828.

#### 68. GASTROPACHA.

Gastropacha, Och. S. iii. 239, 1810. Phyllodesma, Hub. V. 190, 1816. Lasiocampa, Boisd. I. M. 2 ed. 71, 1840.

1. GASTROPACHA ILICIFOLIA.

Phalæna-B. ilicifolia, *Linn. S. Nat.* i. 813. Bombyx Betulifolia, *Hüb. B.* t. 44, f. 190. Gastropacha ilicifolia, *Och. S. E.* iii. 240.

2. GASTROPACHA QUERCIFOLIA. The Oak Lappet.

B. M.

Phalæna-B. Quercifolia, Linn. S. Nat. i. 497, 1758. Gastropacha Quercifolia, Step. H. ii. 52, 1828. West. & H. M. i. 60, t. 12, f. 4—7, 1842.

Fam. IV. ARCTIIDÆ.

Arctiidæ, Step. H. ii. 3, 1828.

Sub-F. I. LIPARIDI.

Liparidi, Step. MSS. Liparides, Bois. I. M. 2 ed. 66, 1840.

#### 69. LYMANTRIA.

Lymantria, Hüb. V. 160, 1816. Psilura, Step. H. ii. 79, 1828.

I. LYMANTRIA MONACHA. The Black Arches.

B. M.

Phalæna-B. Monacha, *Linn. S. Nat.* i. 501, 1758.
Psilura Monacha, *Step. H.* ii. 67, 1828. West. & H. M. i. 86, t. 17, f. 4-7, 1842.
Var. a. Hypogymna Monacha, *Cur. B. E.* xvi. t. 767, 1839.

#### 70. HYPOGYMNA.

Hypogymna, Step. H. ii. 55, 1828. Porthetria, p., Hüb. V. 160, 1816.

1. HYPOGYMNA DISPAR. The Gipsy.

B. M.

Phalæna-B. diapar, Linn. S. Nat. i. 501, 1758. Hypogynna dispar, Step. H. ii. 55, 1828. Porthetria dispar, West. & H. M. i. 85, t. 17, f. 1-3, 1842.

#### 71. DASYCHIRA.

Dasychira, Step. H. ii. 55, 1828. Orgyia, Hüb. V. 161, 1816. Orgya, Zett. I. L. 926, 1840.

DASYCHIBA FASCELINA. The Dark Tussock.
 Phalæna-B. fascelina, Linn. S. Nat. i. 503, 1758.
 Dasychira fascelina, Step. H. ii. 58, 1828. West. & H. M. i. 87, 1. 17, f. 14—16, 1842.

Bombyx Medicaginis, Hub. Bo. t. 21, f. 81, 1799?

DASYCHIRA PUDIBUNDA. The Light Tussock.
 Phalæna-B. pudibunda, Linn. S. Nat. i, 503, 1758.
 Dasychira pudibunda, Step. H. ii. 59, 1828. West. & H. M. i. 87, t. 17, f. 17—19, 1842.
 Bombyx Juglandis, Hüb. Bo. t. 21, f. 84, 85, 1799?

## 72. DEMAS.

Demas, Step. H. ii. 55, 1828. Colocusia, Och. (S. iv. 63, 1816). 1. DEMAS CORYLI. The Nut-tree Tussock.

B. M.

Phalæna-B. Coryli, *Linn. S. Nat.* i. 503, 1758. Demas Coryli, *Step. H.* ii. 60, 1828. *West. & H. M.* i. 88, t. 17, f. 20, 21, 1842.

#### 73. ORGYIA.

Orgyia, Step. H. ii. 55, 1828. Notolophus, Germ. Pr. 35, 1811. Gynaëphora, Hüb. V. 161, 1816.

1. Orgyla antiqua. The Common Vapourer.

B. M.

Phalæna-B. antiqua, Linn. S. Nat. i. 504, 1758. Orgyia antiqua, Step. H. ii. 61, 1828. West. & H. M. i. 86, t. 17, f. 8—10, 1842. Phalæna gonostigma, Scop. C. No. 497, 1763.

Phalæna paradoxa, Retz. G. 36, 1783.

- Orgyia antiqua,* Wing.—Tr. Ent. Soc. v. 119, t. xiv. f. 5, 1849, hermap.
- 2. Orgyia gonostigma, The Scarce Vapourer.

  Phalæna-B. gonostigma, Linn. S. Nat. ii. 826, 1767.

  Orgyia gonostigma, Step. H. ii. 61, 1828. Cur. B. E. viii. t. 378, 1831.

Phalæna antiqua, Scop. C. 20, 496, 1763. Gynaëphora recens, Hüb. (V. 161, 1816).

#### 74. LÆLIA.

Lælia, Step. H. ii. 62, 1828. Laria, p., Hüb. V. 159, 1816.

1. LELIA CŒNOSA. The Whittlesea Ermine.

B. M.

Bombyx cœnosa, *Hüb. Bo.* t. 51, f. 218, 1812? Arctia cœnosa, *Cur. B. E.* ii. t. 68, 1825. Lælia cœnosa, *Step. H.* ii. 63, 1828. Lælia pyrrhopa, *Step. MSS.*, olim.

#### 75. LEUCOMA.

Leucoma, Step. H. ii. 63, 1828. Laria, p., Hüb. V. 159, 1816. 1. LEUCOMA VAU-NIGBUM. The Black V. Moth.

B. M.

Bombyx Vau-nigrum, Fab. S. E. 557, 1775. Leucoma Vau-nigrum, Step. H. ii. 64, t. 16, f. 2, 1828. West. & H. M. i. 89, t. 18, f. 1, 1842.

Bombyx nivosa, Schiff. (W. V. 52, 1776).

## 76. STILPNOTIA.

Stilpnotia, West. 3 H. M. i. 90, 1842. Arctornis, p., Germ. Pr. 18, 1811. Leucoma, p., Step. H. ii. 63, 1828.

1. STILPNOTIA SALICIS. The White Satin Moth.

B. M.

Phalmna-B. Salicis, *Linn. S. Nat.* i. 502, 1758. Leucoma Salicis, *Step. H.* ii. 64, 1828. Stilpnotia Salicis, *West. & H. M.* i. 90, t. 18, f. 2—4, 1842. Phalmna apparens, *Retz. G.* 37, 1783.

#### 77. EUPROCTIS.

Euproctis, Hüb. V. 159, 1816. Arctornis, t., Germ. Pr. 13, 1811, Porthesia, Step. H. ii. 65, 1828.

Euproctis Chrysorrhæa. The Brown-tail Moth.
 Phalæna-B. chrysorrhæa, Linn. S. Nat. i. 502, 1758.
 Phalæna phæorrhæa, Curt. B. T. Moth, 1782.

Porthesia auriflua, Step. H. ii. 66, 1828. West. & H. M. i. 91, t. 18, f. 9-11, 1842. Var. a. Bombyx chrysorrhœa, Hüb. Bo. t. 58, f. 248, 249, 1814 f

2. EUPROCTIS AURIFLUA. The Yellow-tail Moth. B. M.

Bombyx auriflua, Fab. E. S. iii. 1, 458, 1793. Porthesia chrysorrhea, Step. H. ii. 65, 1828. West. & H. M. i. 90, t. 18, f. 7, 8, 1842.

3. Bombyx aurifluus, Haw. L. B. 108, 1803.

2. Bombyx chrysorrhœus, Haw. L. B. 108, 1803.

# Sub-F. II. CHELONIDI.

Chelonidi, Step. MSS. Chelonides, Bois. I. M. 2 ed. 61, 1840.

#### 78. HYPERCOMPA.

Hypercompa, Step. H. ii. 55, 1828. Hypercampa, Cur. G. 143, 1830. Heraclia, p., Hüb. V. 180, 1816. Callimorpha, Doub. (L. 4, 1848).

1. HYPERCOMPA DOMINULA. The Scarlet Tyger.

B. M.

Phalæna-N. Dominula, Linn. S. Nat. ii. 834, 1767. Hypercompa Dominula, Step. H. ii. 67, 1828.

Heraclia Dominula, West. & H. M. i. 96, t. 19, f. 16, 17, 1842.

Bombyx Domina, Hüb. Bo. t. 27, f. 117, 118, 1800? Var. a. Hypercompa Dominula, var., Bree.—Loud. M. N. H. vi. 541, f. 72, 1833.

Bombyx Domina, var., Hüb. Bo. t. 52, f. 223, 1812?

#### 79. DIACRISIA.

Diacrisia, Hüb. V. 169, 1816. Euthemonia, Step. H. ii. 55, 1828.

1. DIACRISIA RUSSULA. The Clouded Buff.

B. M.

Phalæna-B. Russula, *Linn. S. Nat.* i. 510, 1758. Eyprepia Russula, *Cur. B. E.* i. t. 21, 1824. Euthemonia Russula, *Step. H.* ii. 68, 1828.

#### 80. ARCTIA.

Arctia, Schr. F. B. ii. 2, 152, 1802. Eyprepia, Auct. Germ. Chelonia, Auct. Gall.

a. ZOOTE, Hüb. V. 181, 1816.

1. ARCTIA CAJA. The Garden Tyger.

`B. M.

Phalæna-B. Caja, Linn. S. Nat. i. 500, 1758. Arctia Caja, Step. H. ii. 69, 1828. West. & H. M. i. 94, t. 19, f. 5-8, 1842. Phalæna-B. erinacea, Retz. G. 36, 1783. Var. a. Arctia Caja, var. West. & H. l. c. f. 7.

Var. b. Arctia semicoccinea, Step. MSS.

Var. c. Caja, var., West. & H. l. c. f. 7.

Var. d.* Engram. Pap. d'Eur. iv. t. 139, f. 187, d.

Var. e. Engram. Pap. d'Eurs iv. t. 141, f. 187, y.

# b. EPICALLIA, Hub. V. 182, 1816.

2. ARCTIA VILLICA. The Cream-spot Tyger.

B. M.

Phalæna-B. Villica, Linn. S. N. i. 501, 1758.

Arctia Villica, Step. H. ii. 71, 1828. West. & H. M. i. 95, t. 19, f, 9, 10, 1842.

Var. a. Arctia cordiger, Step. M.S.S.

Engram. Pap. d Eur. v. t. 151, f. 196, o.

Var. b. Arctia Æthiops,* Step. MSS.

Aber.* Engram. Pap. d'Eur. iv. t. 140, f. 187, l.

#### 81. PARASEMIA.

Parasemia, Hüb. V. 181, 1816. Nemeophila, Step. H. ii. 55, 1828.

1. PARASEMIA PLANTAGINIS. The Wood Tyger.

B. M.

Phalæna-B. Plantaginis, Linn. S. Nat. i. 501, 1758. Nemeophila Plantaginis, Step. H. ii. 73, 1828. West. & H. M. i. 96, t. 19, f. 14, 15, 1842.

Var. a. Bombyx hospita, Schiff. (W. V. 310, 1776). Engram Pap. d'Eur. iv. t. 147, f. 192, a, b. Var. b. Phalæna Alpicola, Scop. C. No. 507, 1763. Engram, Pap. d'Eur. iv. t. 147, f. 192, d.

## 82. PHRAGMATOBIA.

Phragmatobia, Step. H. ii. 55, 1828. Arctia, Hub. V. 183, 1816.

1. PHRAGMATOBIA FULIGINOSA. The Ruby Tyger. B. M. Phalana-B. fuliginosa, Linn. S. Nat. i. 509, 1758.

Phragmatobia fuliginosa, Step. H. ii. 71, 1828. West. & H. M. i. 93, t. 19, f. 1, 2, 1842.

#### 83. SPILOSOMA.

Spilosoma, Step.—Cur. l. c. infra. Estigmene, p., Hüb. V. 184, 1816.

1. SPILOSOMA MENTHASTRI. The Large Ermine.

B. M.

Bombyx Menthastri, Schiff. (W. V. 54, 1776). Spilosoma Menthastri, Step. H. ii. 75, 1828. West. & H. M. i. 91, t. 18, f. 12—14, 1842.

Phalæna-B. Iubricepeda, Q., Linn. S. Nat. ii. 829, 1767. Phalæna Erminea, Marsh.—Linn. T. i. 70, t. 1, f. 1, 1791. Var. a. Spilosoma Menthastri, var. Step. H. ii. 75, t. 16, f. 3, 1828. Var. b. Spilosoma Walkeri,* Cur. B. E. ii. t. 92, 1825.

2. SPILOSOMA PAPYRATIA. The Water Ermine.

B. M.

Phalæna Papyratia, Marsh.—Linn. Tr. i, 72, t. 1, f. 4, 1791. Spilosoma Papyratia, Step. H. ii. 76, 1828. Bombyx Menthestri, var. Bork.—Rhein. M. i. 343, 1793.

Var. a. Bombyx Urticæ, Esp. S. iii. Sup. 20, t. 83, f. 2, 1794.
Spilosoma Urticæ, Step. H. ii. 76, 1828.

3. SPILOSOMA LUBRICEPEDA. The Spotted Buff. B. M.

Phalæna-B. lubricepeda, Linn. S. Nat. i. 505, 1758.
 Spilosoma lubricepeda, Step. H. ii. 79, 1828. West. & H. M. i. 92, t. 18, f. 17—19, 1842.

Phalama Lepus, Retz. G. 37, 1783.

Var. a. Bombyx radiatus, Haw.—Ent. Tr. i. 336, 1812. West. & H. M. l. c. f. 19.
 Var. b. Bombyx Luxeri,* Goda. L. F. iv. 360, t. 37, f. 4, 1822.

## 84. CYCNIA.

Cycnia, Hiib. V. 184, 1816. Diaphora, Step. H. ii. 55, 1828.

1. CYCNIA MENDICA. The Spotted Muslin.

B. M.

Phalæna-B. meudica, *Linn. F.* ii. No. 1127, 1761. Diaphora mendica, *Step. H.* ii. 78, 1828.

Cycnia mendica, West: & H. M. i. 92, t. 18, f. 20—22, 1842. §. Diaphora mendica,* Wing.—Tr. Ent. Soc. v. 120, t. 14, f. 5, 1849.

# Sub-F. III. PSYCHIDI.

Psychidi, Step. MSS. Psychidæ, Bois, I. M. 44, 1829.

## 85. STERRHOPTERIX.

Sterrhopterix, Hüb. ? V. 399, 1816. Penthophers, Cur. B. E. v. fo. 213, 1828. Pachythelia, West. (Ent. Tr. v. Pr. xlii, 1849).

- STERRHOPTERIX NIGRICANS. The Large Chimney Sweep. B. M. Penthophera nigricans, Cur. B. E. v. t. 213, 1828. Step. H. ii. 79, 1828.
   Psyche Febretta, Fonse. P—Ann. Ent. S. Fr. iv. 107, 1. 1, f. 8—10, 1835.
- STERRHOPTERIX OPACELLA. The Dusky Chimney Sweep. B. M.
  Psyche opacella, H. Schæff. S. ii. 20, t. 19, f. 102, 1847.
  Psyche Fenella, Newm.—Zool. viii. App. xcix. 1850.
  Sterrhopterix hyalinella, Step. C. B. L. 56, 1850.

# 86. PSYCHE.

Psyche, Schr. F. B. ii. 1, 156, 1801. Leptopterix, Hüb. ? V. 399, 1816. Saccophora, Sodoff.—Bull. S. I. Mosc. 12, 1837.

PSYCHE FUSCA. The Brown Muslin.
 Nudaria fusca, Haw. L. B. 157, 1810, 3.
 Psyche fusca, Step. H. ii. 80, t. 18, f. 3, \$, f. 4, \$, 1829.
 West. & H. M. i. 83, t. 16, 17, 26—28, 1842.

Psyche calvella, Och. E. S. iii. 172, 1810, 8. Tinea hirsutella, Hüb. Ti. t. 1, f. 3, 1796.

## 87. FUMEA.

Fumea, Haw. (Ent. Tr. i. 340, 1813). Fumaria, Haw. L. B. 373, 1812. Epichnopterix, Hüb. V. 399, 1816.

1. Fumea radiella. The Chimney Sweeper's Boy. B. M. Fumea radiella, Cur. B. E. vii. t. 332, 1830.

Fumaria plumistrea, Haw. L. B. 474, 1812. Fumea muscella, Step. H. ii. 82, 1829.

Var. a. Fumaria muscea, Haw. L. B. 473, 1812.
 Tinea lucidella, Haw. (Pr. 34, 1802).

Fumea pulla, Step. H. ii. 82, 1829.

Var. b. Fumaria pectinea, Haw. L. B. 473, 1812. Step. H. ii. 83, 1829.

Var. c. Fumea Bombycella? Step. H. ii. 83, 1829.

2. Fumea nitidella, Hüb. T. t. 1, f. 6, 1796.
Fumea nitidella, Step. H. fi: 82, 1829.
Phalæna nana, Bork. f E. S. iii. 283, 1790.
Psyche Carpini, Schr. F. B. ii. 2, 90, 1802.

3. Fumea reticella. The Netted Chimney Sweep. B. M. Psyche reticella, Newm.—(Zool. v. 1863, 1847). Psyche reticella, Newm.—Zool. vii. App. xciv. 1850.

#### 88. NUDARIA.

Nudaria, *Haw. L. B.* 156, 1810. Paidea, *Hüb. V.* 158, 1816.

1. NUDARIA MUNDANA. The Muslin.

B. M.

Phalæna-A. mundana, Linn. S. Nat. ii. 812, 1767. Nudaria mundana, Step. H. ii. 84, 1829. Cur. B. E. ix. t. 400, 1832.

Bombyx nuda, Hüb. Bo. t. 17, f. 63, 64, 1799?

Var. a. Bombyx Hemerobia, Hüb. Bo. t. 17, f. 65, 1799?
Nudaria Hemerobia, Step. H. ii. 84, 1829. Wood, I. E. t. 17, f. 87.

 NUDARIA SENEX. The Round-winged Muslin. B. M. Bombyx senex, Hub. Bo. t. 55, f. 236, 237, 1812? Nudaria senex, Step. H. ii. 84, t. 18, f. 2, 1829. Wood, I. E. t. 7, f. 88.

Nudaria rotunda, Haw. L. P. 156, 1810.

Heterogenea, Knoch. B. iii. 60, 1783.

1. HETEROGENEA ASELLUS. The Triangle.

Bombyx Asella, Schiff. (W. V. 65, 1776). Step. 17, f. 2, 1829.

Heterogenea cruciata, Knoch, B. iii. 63, 1783.

### 90. LIMACODES.

Limacodes, Lat. F. N. 474, 1825. Apoda (Genus Avium), Haw. L. B. 137, 1810.

1. LIMACODES TESTUDO. The Festoon.

Bombyx Testudo, Schiff. (W. V. 65, 1776). Step 1829. West. & H. M. i. 81, t. 16, f. 5—7, 29, 18 Bombyx Limacodes, Esp. S. iii. 140, t. 26, f. 3—9, Phalæna Limax, Bork. E. S. iii. 449, 1790. Phalæna funalis, Don. B. I. iii. 9, t. 76, 1795. Tortrix Testudinana, Hüb. To. t. 26, f. 164, 165, 17

3. Bombyx Bufo, Fab. M. ii. 121, 1787.

Bombyx Asella, Esp. S. iii. Sup. 36, t. 85, f. 4, 179

Bombyx sulphurea, Fab. G. M. 279, 1777.

Bombyx Testudo, Fab. M. ii. 121, 1787.

# Sub-Div. II. LEPIDOPTERA NOCTURNA. Lepidoptera Nocturna, Step. H. ii. 86, 1829.

#### Fam. I. LITHOSIIDÆ.

Lithosiidæ, Step. H. ii. 88, 1829.

#### 91. CALLIMORPHA.

Callimorpha, Lat. G. iv. 220, 1809. Tyria, Hüb. V. 166, 1816. Euchelia, t., Bois. (I. M. 39, 1829).

1. CALLIMORPHA JACOBÆÆ. The Cinnabar Moth.

B. M.

Phalæna-N. Jacobææ, *Linn. S. Nat.* i. 511, 1758. Callimorpha Jacobææ, *Step. H.* ii. 90, 1829. *Cur. B. E.* xi. t. 499, 1834.

Var. a. Callimorpha semiflava,* Step. MSS. Engram. Pap. d'Eur. vi. t. 232, f. 312, d.

#### 92. MILTOCHRISTA.

Miltochrista, Hüb. V. 166, 1816. Callimorpha, p., Step. H. ii. 90, 1829. Calligenia, Dup. C. 59, 1846.

1. MILTOCHRISTA MINIATA. The Red Arches.

B. M.

Phalæna miniata, Forst, C. 75, 1771.
Callimorpha miniata, Step. H. ii. 90, 1829. Wood, I. E, t. 8, f. 92, 1836.
Bombyx rosea, Fab. S. E. 587, 1775.
Noctua rubicunda, Schiff. (W. V. 68, 1776).

#### 93. EULEPIA.

Eulepia, Cur. B. E. ii. 56, 1825. Callopis, Billb. (Cat. 1820). Emydia, Bois. (I. M. 39, 1829).

### a. Spiris, Hub. V. 169, 1816.

1. EULEPIA GRAMMICA. The Feathered Footman.

B. M.

Phalmna-B. grammica, Linn. F. ii. No. 1134, 1761. Eulepia grammica, Step. H. ii. 91, t. 17, f. 3, S. West. 4 H. M. i. 100, t. 20, f. 3, 4, 1842.

Var. a. Phalæna striata, Bork. E. S. iii. 471, 1790.

Var. b. Phalæna-B. melanoptera,* Brahm. I. K. ii. 435, 1790.

# b. Coscinia, p., Hub. V. 169, 1816,

2. EULEPIA CRIBRUM. The Speckled Footman.

B. M.

Phalæna-B. cribrum, Linn. F. ii. No. 1136, 1761. Eulepia cribrum, Cur. B. E. ii. t. 56, 1825. Step. H. ii. 92, 1829.

### 94. DEIOPEIA.

Deiopeia, Step.—Cur. B. E. iv. f. 169, 1827. Utetheisa, p., Hüb. V. 168, 1816. Euchelia, p., Bois. (I. M. 39, 1829).

1. DEIOPEIA PULCHELLA. The Crimson Speckled Footman. B. M.

Phalæna-N. pulchella, Linn. S. Nat. i. 524, 1758.

Deiopeia pulchella, Cur. B. E. iv. t. 169, 1827. Step. H. ii. 93, 1829.

Noctua pulchra, Schiff. (W. V. 68, 1776). Noctua Lotrix, Cram. K. ii. t. 109, f. E. F. 1780?

#### 95. LITHOSIA.

Lithosia, Fab. E. S. Sp. 459, 1798. Lichenea, Sodoff.—Bull. S. I. Mosc. 12, 1837. Setina, p., Schr. F. B. ii. 2, 165, 1802.

а. Systeopha, Hüb. V. 166, 1816,

1. LITHOSIA AUREOLA. The Orange Footman.

B. M.

Bombyx aureola, Hüb. Bo. t. 24, f. 98, 1800? Lithosia aureola, Step. H. ii. 94, t. 18, f. 1, 1828. Noctua unita, Esp. ? S. iv. 100, t. 93, Noct. 14, f. 6, 7, 1787. Noctua aurantina, Haw. (Pr. 13, 1802). Lithosia aurantia, Haw. L. B. 147, 1810.

### b. Pelosia, Hüb. V. 165, 1816.

2. LITHOSIA HELVOLA. The Buff Footman.

B. M.

Bombyx helvola, *Hüb. Bo.* t. 23, f. 95, 1799? Lithosia helvola, *Step. H.* ii. 94, 1829. *West. & H. M.* i. 102, t. 20, f. 15, 1842. Lithosia helveola, *Och. E. S.* iii. 133, 1810.

- 3. Noctua deplana, Esp. S. iv. 97, t. 93, Noct. 14, f. 1, 2, 1787.
- 2. Noctua complana, Esp.? S. iv. 95, t. 92, Noct. 13, f. 7, 8, 1787.
- 3. LITHOSIA FLAVA. The Straw-coloured Footman. B. M.

Lithosia flava, Fab. F. E. S. Sp. 461, 1798. Step. H. ii. 95, 1829. West. & H. M. i. 101, t. 20, f. 6, 1842.
 Lithosia stramineola, Doub.—Zool. v. 1914, 1847.

Var. a. Lithosia gilveola, Step. H. ii. 95, 1829. West. & H. M. i. 101, t. 20, f. 11, 1842.

4. LITHOSIA COMPLANA. The Scarce Footman. B. M.

Lithosia complana, Linn. S. Nat. i. 512, 1758. Noctua plumbeola, Hüb. Bo. t. 24, f. 100, 1800? Lithosia depressa, Step. H. ii. 96, 1829. West. & H. M. i. 101, t. 20, f. 14, 1842.

- Lithosia Lurideola, Treit. ?—Allg. L. No. 217, 68, 1817.
   Lithosia complanata, Bois. (I: M. 2 ed. 58, 1840).
   Lithosia complana, Haw. L. B. 147, 1810. Step. H. ii. 95, 1829. West. & H. M. i. 101, t. 20, f. 12, 13, 1842.
- 6. LITHOSIA GRISEOLA. The Dun Footman. B. M. Bombyx griseola, Hüb. Bo. t. 23, f. 97, 1799? Step. H. ii.

96, 1828. West. & H. M. i. 101, t. 20, f. 10, 1842. Noctua luteolina, Haw. (Pr. App. 3, 1802).

Var. a. Lithosia plumbeolata, Step. H. ii. 96, 1829. West. & H. M. i. 101, t. 20, f. 7, 1842.

# c. EILEMA, Hüb. V. 165, 1816.

7. LITHOSIA LUTEOLA. The Small Footman.

B. M.

Bombyx luteola, Schiff. (W. V. 68, 1776). Hüb. Bo. t. 23, f. 92, 1799?

Noctua lutosa, Esp. S. iv. 100, t. 93, Noct. 14, f. 8, 9, 1787. Var. a. Lithosia pygmæola, Doub.—Zool. v. 1914, 1847.

8. LITHOSIA MUSCERDA. The Spotted Footman.

B. M.

Phalæna-N. muscerda, Hüfn.—(Berl. M. iii. 400, 1780?) Lithosia muscerda, Cur. B. E. i. t. 36, 1824. Step. H. ii. 97, 1829.

Tinea perlella, Fab. M. ii. 241, 1787. Bombyx pudorina, Esp. S. iv., Sup. 67, t. 196, f. 4, 6, 1794. Bombyx cinerina, Esp. S. iv., Sup. 67, 1794.

#### 96. ŒNISTIS.

Enistis, Hub. V. 165, 1816.

1. ŒNISTIS QUADRA. The Large Footman.

B. M

Phalseoa-N. quadra, Linn. S. Nat. i. 511, 1758. Lithosia quadra, Step. H. ii. 97, 1829. Œnistis quadra, West. & H. M. i. 102, t. 20, f. 17—19, 1842. S. Phalsena-N. deplana, Linn. M. i. 537, 1771. Var. a. Engram. Pap. d'Eur. vi. t. cexxii. f. 298, e, k. 1789.

### 97. ATOLMIS.

Atolmis, Hüb. V. 164, 1816. Gnophria, Step. H. ii. 98, 1829.

Atolmis rubricollis. The Red-necked Footman.
 Phalæna-N. rubricollis, *Linn. S. Nat.* i. 511, 1758.
 Gnophria rubricollis, *Step. H.* ii. 98, 1829. West. & H. M. i. 103, t. 20, f. 20, 21, 1842.

# 98. CYBOSIA.

Cybosia, Hüb. V. 167, 1816. Setina, p., Step. H. ii. 98, 1829. 1. Cybosia mesomella. The Four-spot Footman.

B. M.

Phalæna-Ti. mesomella, *Linn. S. Nat.* i. 535, 1758. Setina mesomella, *Step. H.* ii. 100, 1829. Cybosia mesomella, *West. & H. M.* i. 104, t. 20, f. 25, 1842. Noctua eborina, *Schiff. (W. V.* 68, 1776).

Var. a. Lithosia lutarella, Haw. ? L. B. 148, 1810. Bombyx eborina, Hub. Bo. t. 63, f. 266.

### 99. ENDROSA.

Endrosa, Hüb. V. 167, 1816. Philea, Dalm.—Act. Holm. 1823. Setina, p., Step. H. ii. 98, 1829.

1. Endrosa irrorella. The Dew Moth.

B. M.

Phalæna-Ti. irrorella, *Linn. S. Nat.* i. 535, 1758. Setina irrorella, *Step. H.* ii. 99, t. 17, f. 1, 1829.

Var. a. Setina roscida, Step. H. ii. 100, 1829.

Var. b. Noctua signata,* Bork. E. S. iii. 258, 1790. West. & H. M. i. 104, i. 20, f. 24, 1842.

Var. c. Lithosia binumerica,* Drapiez.—Bull. S. Nat. 1829?

# Fam. II. NOCTUIDÆ.

Noctuidæ, Step. H. ii. 100, 1829.

# Sub-F. I. NOCTUELIDI.

Noctuelidi, Guén.—Ann. E. S. Fr. vi. 347, 1837.

#### 100. TRIPHÆNA.

Triphæna, Och. (S. iv. 69, 1816, 3). Tr. v. 1, 252, 1825. Xanthoptera, Sodoff.—Bull. S. I. Mosc. 13, 1837.

# a. TRIPHÆNA, Och. (ut supra).

 TRIPHENA ORBONA. The Lesser Yellow Underwing. B. M. Noctua orbona, Fab. M. ii. 150, 1787. Triphæna orbonn, Step. H. ii. 102, 1829. West. & H. M. i. 108, t. 21, f. 1, 1842.

Noctua subsequa, Esp. S. iv. (149), t. 104, Noct. 25, f. 1-3, 1787-88.

Phalæua-N. Pronuba-minor, Vill. E. ii. 279, 1789. Noctua Comes, Hüb. No. t. 111, f. 521, 1812?

Aber.? Triphana consequa, Cur. B. E. viii. t. 348, 1831. Triphana Curtisii, Newm.—Zool. ii. 399, 1844, 1.

- TRIPHENA SUBSEQUA.* The Lunar Yellow Underwing. B. M. Noctua subsequa, Schiff. (W. V. 79, 1766).
   Triphæna subsequa, Step. H. ii. 103, 1829.
   Var. a. Noctua consequa, Hüb. No. t. 23, f. 105, 1798.
- 3. ТRIPHÆNA PRONUBA. The Large Yellow Underwing. В. М. Phalæna-N. Pronuba, Linn. S. Nat. i. 512, 1758

  Triphæna Pronuba, Step. H. ii. 103, 1829. West. & H. M. i. 108, t. 21, f. 1—3, 1842.

Var. a. Triphæna innuba, Treit. S. v. 1, 265, 1825. Step. H. ii. 104, 1829. West. & H. M. l. c. f. 1.
 Var. b. Engram. Pap. d'Eur. vii. t. cclxxi. f. 434, i, 1791, albino.

TRIPHENA INTERJECTA. The Least Yellow Underwing. B. M. Noctua interjecta, Hüb. No. t. 23, f. 107, 1798?
 Triphæna interjecta, Step. H. ii. 105, 1829. West. & H. M. i. 109, t. 21, f. 8, 1842.

b. LAMERA, Hub. V. 221, 1816.

[B. M.

- TRIPHENA FIMBRIA. The Broad-bordered Yellow Underwing.
   Phalæua-N. fimbria, Linn. S. Nat. ii. 842, 1767.
   Triphæna fimbria, Step. H. ii. 104, 1829. West. & H. M. i. 108, t. 21, f. 6, 7, 1842.
   Phalæua-N. Domiduca, Hüfn.—(Berl. M. iii. 404, 1769).
   Noctua Solani, Fab. M. i. 150, 1787.
  - c. Euschesis, Hub. V. 221, 1816.
- 6. TRIPHENA JANTHINA. The Lesser Broad-border. B. M. Noetua Janthina, Schiff. (W. V. 78, 1776). Triphæna Jauthina, Step. H. ii. 106, 1829. West. & H. M. i. 109, t. 21, f. 9, 1842.

Noctua Domiduca, Knoch, B. ii. 63, 1782. Phalæna-N. Fimbria-minor, Vill. E. ii. 278, 1789. Phalæna-N. Janthe, Bork. E. S. iv. 109, 1792.

#### 101. THALPOPHILA.

Thalpophila, Hüb. V. 208, 1816. Cerigo, Step. (Cat. ii. 63, 1829). Id. H. ii. 106, 1829.

Thalpophila Texta. The Straw Underwing.
 B. M. Phalæna-N. texta, Lang. V. 133, 1786. Esp. S. iv. (185), t. 108, Noct. 29, f. 1, 2, 1787—89.
 Cerigo texta, Step. H. ii. 107, 1829.
 Phalæna-N. matura, Hüfm.—(Berl. M. iii. 414, 1769).
 Noctua Cytherea, Fab. E. S. iii. 2, 57, 1794.
 Cerigo Cytherea, West. § H. M.-i. 109, t. 21, f. 10, 1842.
 Noctua connexa, Hüb. No. t. 23, f. 109, 1798, t. 118, f. 548,

Q. Noctua prospicua, Haw. L. B. 161, 1810.

1811.

#### 102. SEGETIA.

Segetis, Step. (Cat. ii. 74, 1829). Id. H. ii. 153, 1829. Sideridis, p., Hüb. V. 232, 1816.

Segetia Xanthographa, The Square-spot Rustic.
 Noctua xanthographa, Schiff. (W. V. 83, 1776).
 Segetia xanthographa, Step. H. ii. 153, 1829. West. & H. M.

i. 143, t. 29, f. 9, 1842. Noctua tetragona, Haw. L. B. 161, 1810.

Aber. Segetia xanthographa,* var., Doug.—Ent. Tr. v. 99, t. 14, f. 1, 1849.

### 103. RUSINA.

Rusina, Step. (Cat. ii. 64, 1929). Id. H. ii. 111, 1829. Scotia, p., Hüb. V. 226, 1816.

1. Rusina ferruginea, The Brown Feathered Rustic. B. M. Bombyx ferruginea, Esp. S. iii. 246, t. 47, f. 5, \$, 6, ♀, 1784. Rusina ferruginea, Step. H. ii. 112, 1829. West. & H. M. i.

113, t. 22, f. 9, 1842.

Noctua tenebrosa, Hüb. No. t. 33, f. 158, 1799?

3. Bombyx phæus, Haw. (Pr. 11, 1802). Id. L. B. 133, 1803.

Q. Noctua obsoletissima, Haw. L. B. 207, 1803.

#### 104. LYTÆA.

Lytwa, Step. (Cat. ii. 64, 1829). Id. H. ii. 107, 1829. Scotia, p., Hüb, V. 226, 1816.

# a. Scotia, Hüb. (ut supra).

1. LYTEA UMBROSA. The Six-striped Rustic.

B. M.

Noctua umbrosa, Hüb. No. t. 97, f. 456, 457, 1809.

Lytæa umbrosa, Step. H. ii. 108, 1829. West. & H. M. i. 110, t. 22, f. 1, 1842.

Noctua radicea, var., Esp. S. iv. (453), t. 143, Noct. 64, f. 3, 1788-96.

Noctua 6-strigata, Haw. L. B. 228, 1810.

# b. Lycophoria, p., Hüb. V. 215, 1816.

2. LYTEA AGATHINA. The Marsh Rustic.

B. M.

Chersotis Agathina, Bois.—Dup. L. F. vii. 359, t. 122, f. 2, 1827.

Lytæa albimacula, Step. H. ii. 137, t. 19, f. 3, 1829.

Noctua Lydia? Bois. (I. M. 63, 1829).

Var. a. Lytwa leucographa, Step. H. ii. 199, 1829. Wood, I. E. t. 8, f. 119.

# 105. CERAPTERYX.

Cerapteryx, Cur. B. E. x. fo. 451, 1833. Lycophotia, p., Hüb. V. 215, 1816. Charmas, p., Step. H. ii. 109, 1829. Heliophobus, Guén.—Ann. E. S. Fr. vii. 350, 1837.

1. CERAPTERYX GRAMINIS. The Aptler.

B. M.

Phalæna-N. Graminis, Linn. S. Nat. i. 506, 1758. Don. B. I. xii. 53, t. 458, 1808.

Charæas Graminis, Step. H. ii. 111, 1829.

Bombyx tricuspis, Esp. S. iii. 348, t. 68, f. 2, 3, 1785.

Q. Cerapteryx hibernica, Cur. B. E. x. 451, 1833. Var. a. Episema albineura, Bois. Ic. t. 74, f. 4, 3, 1835.

#### 106. CHARÆAS.

Charæas, Step. (Cat. ii. 64, 1829). Id. H. ii. 108, 1829.

a. Tholera, p., Hüb. V. 214, 1816. Hadena A. & B., Guén.—Ann. E. S. Fr. vii. 215, 1838.

1. CHARMAS CESPITIS. The Hedge Rustic.

B. M.

Noctua cespitis, Schiff. (W. V. 82, 1776). Charmas cespitis, Step. H. ii. 109, 1829. West. & H. M. i. 111, t. 22, f. 4, 5, 1842.

Noctua Hordei, Schr. F. B. ii. 1, 351, 1801. Var. a. Agrotis autumoalis, Cur. P (B. E. fo. 165, 1827). Var. b. Charæas confinis, Step. H. ii. 109, 1829.

b. Вигнуз, р., Hüb. V. 226, 1816. Epunda, р., Dup. С. 141, 1846.

2. CHAREAS LUTULENTA. The Barred Feathered Rustic. B. M.

Noctua lutulenta, Schiff. (W. V. 81, 1776). Noctua fusca, Haw. L. B. 119, 1803.

Charæas fusca, Step. H. ii. 109, 1829. West. & H. M. i. 112, t. 22, f. 6, 1842.

Var. a. Charwas consimilis, Step. H. ii. 40, 110, 1829. Var. b. Charwas orthostigma, Step. l. c. 1829.

3. CHARRAS ÆTHIOPS. The Black Rustic.

B. M.

Noctua Æthiops, Och. (S. iv. 67, 1816). Noctua nigricans, Hüb. No. t. 116, f. 709, 1826. Agrotis albicolon, Cur. ? (B. E. iv. fo. 165, 1827). Oharæas nigra, Step. H. ii. 110, 1829. West. & H. M. i. 112, t. 22, f. 7? 1842.

# 107. AGROTIS.

Agrotis, Och. (S. iv. 66, 1816, 3). Tr. v. 1, 125, 1825. Agrotes, Hüb. V. 225, 1816, 9.

# a. GEORYX, Hüb. V. 227, 1816.

### 1. AGROTIS SEGETUM. The Common Dart.

B. M.

Noctua Segetum, Schiff. (W. V. 252, 1776). Agrotis Segetum, Step. H. ii. 115, 1829. West. & H. M. i. 116, t. 23, f. 3—5, 1842.

Noctua Segetis, Fab. E. S. iii. 6, 61, 1793.

Var. a. Bombyx caliginosa, Esp. S. iii. 323, t. 54, f. 3, 1785. Var. b, Bombyx fuscosa, Esp. S. iii. 324, t. 54, f. 4, 1785.

Var. c. Bombyx catænaius, Haw. L. B. 114, 1803. Var. d. Bombyx peetinatus, Haw. L. B. 115, 1803. Var. e. Bombyx monileus, Haw. L. B. 115, 1803.

Var. f. Bombyx spinulus, Haw. L. B. 115, 1803.
Var. g. Bombyx connexus, Haw. L. B. 116, 1803.
Var. h. Bombyx corticeus, Haw. L. B. 116, 1803.

Var. i. Bombyx venosus, Haw. L. B. 116, 1803.

Var. k. Bombyx subatratus, Haw. (Pr. 9, 1802). Id. L. B. 116, 1803.
Var. l. Bombyx nigricornutus, Haw. (Pr. 9, 1802). Id. L. B. 117,

1803.

Var. m. Noctua fasciola, Haw. MSS. Var. n. Agrotis affinis, Step. MSS., olim.

*Aber.? Agrotis monostigma, Cur.? (B. E. iv. fo. 165, 1827).

# 2. AGROTIS CORTICEA. The Heart and Club.

B. M.

Noctua corticea, Hüb. No. t. 30, f. 145, 1799? Agrotis corticea, Step. H. ii. 114, 1829. West. & H. M. i. 115, t. 23, f. 6, 1842.

Bombyx exclamationis? Esp. S. iii. 321, t. 64, f. 1, 1785.

Bombyx clavigerus, *Haw. L. B.* 114, 1803.

Q. Noctua sordida, *Hüb. No.* t. 32, f. 154, 1799?

Bombyx subfuscus, *Haw. L. B.* 114, 1803.

# b. AGRONOMA, p., Hüb. V. 227, 1816.

# 3. AGROTIS VALLIGERA. The Archer's Dart.

B. M.

Noctua valligera, Schiff. (W. V. 80, 1776). Agrotis valligera, Step. H. ii. 118, 1829. West. & H. M. i. 117, t. 23, f. 11, 1842.

Bombyx clavis, Esp. S. iii. 319, t. 63, f. 5, 1785. Phalæna-N. clavifera, Vill. E. ii. 174, 1789. Bombyx sagittiferus, Haw. L. B. 118, 1803.

B. M.

Var. a. Bombyx trigonalis, Esp. S. iii. 382, t. 75, f. 6, 1785. Var. b. Noctua hibernica, Haw. MSS., var.

# c. Ogygia, p.? Hüb. V. 225, 1816.

4. AGROTIS LUNIGERA.* The Crescent Dart. B. M. Agrotis lunigera, Step. H. ii. 113, t. 20, f. 3, 1829, 4.

# d. PERIDROMA, Hub. V. 227, 1816.

Agrotis suffusa, Schiff. (W. V. 80, 1776).
 Agrotis suffusa, Step. H. ii. 116, 1829. West. & H. M. i. 116, t. 23, f. 2, 1842.
 Phalæna-N. Upsilon, Hüfn.—Berl. M. iii. 416, 1769).
 Bombyx spinula, Esp. S. iii. 320, t. 63, f. 6, 7, 1785.
 Bombyx stigmaticus, Haw. (Pr. 9, 1802).
 Var. a. Phalæna-N. spinifera, Vill. E. ii. 174, 1789.

6. Agrotis saucia, Hüb. No. t. 81, f. 378, 1804?
Agrotis saucia, West. & H. M. i. 115, t. 23, f. 1, 1842.
Phalæna-N. polygona, Bork. & E. S. iv. 520, 1792.
Noctua majuscula, Haw. L. B. 218, 1810.
Noctua æqua, Hüb. No. t. 171, f. 811, 812, 1835.
Var. a. Noctua margaritosa, Haw. L. B. 218, 1810.

Var. a. Noctua margaritosa, Haw. L. B. 218, 1810. Noctua æqua, Hüb. No. t. 122, f. 564, 1814? Agrotis æqua, Step. H. ii. 126, 1829.

*?7. AGROTIS SUBGOTHICA. The Gothic Dart. B. M. Noctua subgothica, *Haw. L. B.* 224, 1810.
Agrotis subgothica, *Step. H.* ii. 126, t. 22, f. 3, 1829.
Noctua fictilis, *Hub.? No.* t. 155, f. 710, 1826.

# е. Метахуја, Нйв. V. 223, 1816.

AGROTIS OBELISCA. The Square-spot Dart.
 Noctua obelisca, Schiff. (W. V. 80, 1776). Goda. L. F. v. 214, t. 64, f. 3, 3, 1824.

3. Bombyx molothina, Esp. ? S. iii., Sp. 33, t. 85, f. 6, 1807.

Q. Bombyx pupillatus, Haw. L. B. 118, 1802.

Agrotis pupillata, Step. H. ii. 128, 1829. Var. a. Noctua ruris, Hüb. No. t. 89, f. 416, 1806.

9. AGROTIS AQUILINA. The Streaked Dart.

B. M.

Noctua aquilina, Schiff. (W. V. 80, 1776). Agrotis aquilina, Step. H. ii. 121, 1829. West. & H. M. i. 121, t. 24, f. 9, 1842. Noctua nigrofusca, Esp. S. iv. (383), t. 127, Noct. 48, f. 6,

1788—95. Phalæna-N. vitta, Bork. E. S. iv. 482, 1792. Noctua domestica, Fab. E. S. iii. 2, 23, 1794.

Var. a. Noctua vitta, Hüb. No. t. 115, f. 533, 34, 1813. Step. H ii. 120, 1829.

Var. b. Agrotis hortorum, Step. H. ii. 122, 1829.

10. AGROTIS TRITICI. The White Line Dart.

B. M.

Phalæna-N. Tritici, *Linn. F.* ii. No. 1211, 1761. Agrotis Tritici, *Step. H.* ii. 121, 1829.

Noctua Tritici, Goda. L. F. v. 225, t. 65, f. 4, 5, 1824.

Noetua Praticola, Hüb. No. t. 123, f. 567, 1814?
 Var. a. Noetua eruta, Hüb. No. t. 136, f. 623, 1816.

Var. b. Noctua recussa, Hiib. ? No. t. 136, f. 630, 1816.

Var. c. Noctua lineolata, Haw. L. B. 223, 1810.

Var. d. Phalana-N. ignobilis, Hufn.-(Berl. M. iii. 306, 1769).

Var. e. Noctua albilinea, Haw. L. B. 223, 1810. Var. f. Noctua valligera, Haw. L. B. 222, 1810.

Agrotis cuncigera, Step. H. ii. 123, 1829. West. & H. M. i. 120, t. 24, f. 7, 1842.

Var. g. Agrotis sagittifera, Step. H. ii. 119, 1829. Var. h. Agrotis ocellina, Step. H. ii. 122, 1829.

f. GEORYX, p., Hüb. V. 227, 1816.

11. AGROTIS CURSORIA. The Coast Dart.

B. M.

Phalæna-N. cursoria, Bork. E. S. iv. 562, 1792. Agrotis cursoria, West. & H. M. i. 123, t. 24, f. 4, 1842. Noctua mixta, Fab. E. S. iii. 2, 36, 1794.

Var. a. Noctua concelorina, Haw. (Pr. 19, 1802). Noctua concolor, Haw. L. B. 243, 1810. Var. b. Agrotis venosa, Step. H. ii. 123, 1829.

# g. PSAMMOPHILA, Step. MSS.

#### 12. AGROTIS RIPE. The Sand Dart.

B. M.

Noctua Ripæ, Hub. No. t. 151, f. 702, 703, 1824. Agrotis Baltica (Andersch.), teste Och. v. 1, 174, 1825.

Var. a. Agrotis De Syllii, Pierret .- Ann. E. S. Fr. viii. 95, t. 8, f. 2, 1839, 9.

Var. b. Agrotis nebulosa, Step. H. ii. 127, t. 22, f. 1, 1829, Q.

### h. BROTIS, Hüb. V. t. 226, f. 1816.

# 13. AGROTIS NIGRICANS. The Garden Dart.

B. M.

Phalæna-N. nigricans, Linn. ? F. S. ii. No. 1128, 1761. Agrotis nigricans, Step. H. ii. 123, 1829. West. & H. M. i. 121, t. 24, f. 10, 12, 1842.

Noctua fumosa, Schiff. (W. V. 81, 1776). Agrotis fumosa, Step. H. ii, 124, 1829.

3. Noctua carbonea, Hub. No. t. 151, f. 700, 701, 1824.

Q. Noctua fumosa, Hüb. No. t, 32, f. 153, 1799?

Var. a. Noctua rubricans, Esp. S. iv. (395), t. 130, f. 2, 3, 1788--95.

Noctua ruris, Haw. L. B. 221, 1810.

Agrotis ruris, Step. H. ii. 125, 1829. Wood, I. E. t. 9, f. 172, 1836.

Var. b. Bombyx chrysostigmatus, Haw. (Pr. 9, 1802).

Var. c. Noctua sordida, Haw. L. B. 222, 1810.

Var. d. Noctua obeliscata, Haw. L. B. 222, 1810. Agrotis obeliscata, Step. H. ii. 124, 1829. Wood, I. E. t. 9, f.

146, 1836, Var. e. Noctua dubia, Haw. L. B. 222, 1810. Agrotis dubia, Wood, I. E. t. 8, f. 148, 1836.

Var. f. Noctua unicolor, Hüb. ? No. t. 117, f. 544, 1813? Var. g. Noctua fuliginea, Hüb. No. t. 131, f. 602, 1816.

Var. h. Agrotis Marshallana, West. & H. M. i. 122, t. 24, f. 15, 1842.

# i. AGRONOMA, p., Hub. V. 227, 1816.

# 14. AGROTIS EXCLAMATIONIS. The Heart and Dart.

B. M.

Phalæua-N. exclamationis, Linn. S. Nat. i. 515, 1758. Agrotis exclamationis, Step. H. ii. 126, 1829. West. & H. M. i. 124, f. 13, 14, 1842.

Phalæna Clavus, Hüfn .- (Berl. M. iii. 298, 1769).

Q. Noctua picea, Haw. L. B. 220, 1810.

Aber.? Agrotis plaga, Step. H. iv. 388, 1835. Wood, I. E. t. 52, f. 1660, 1840.

# j. Omia, Hüb. V. 244, 1816.

15. AGROTIS PUTA. The Shuttle-shaped Dart.

B. M.

Noctua puta, Hüb. No. t. 52, f. 255, 1800.

Bombyx radius, Haw. (Pr. 10, 1802). Id. L. B. 119, 1803. Agrotis radia, Step. H. ii. 119, 1829. West. & H. M. i. 117, t. 23, f. 12, 1842.

Var. a. Noctua lignosa, Goda. L. F. v. 241, t. 67, f. 5, 6, 1824.

Var. b. Noctua radiola, Haw. MSS.

Agrotis radiola, Step. H. ii. 119, t. 20, f. 1, 1829.

# k. Scotta, p., Hub. V. 226, 1816.

16. AGROTIS CINEREA. The Light Feathered Rustic. B. M.

Phalæna-N. cinerea, Bork. E. S. iv. 547, 1794.

Agrotis cinerea, Cur. B. E. iii. t. 165, 1827. Step. H. ii. 127, 1829.

Bombyx denticulatus, Haw. (Pr. 11, 1802). Id. L. B. 133, 1803.

Var. Q. Noctua obscura, Hüb. No. t. 104, f. 490, 1811? Q.

### 108. CŒNOPHILA.

Cœnophila, Step. MSS. Graphiphora, p., Step. (olim.) H. ii. 129.

1. CCNOPHILA SUBROSEA. The Rosy Marsh Moth. B. M. Graphiphora subrosea, Step. H. ii. 200, t. 19, f. 1, 3, 1829. Graphiphora rhomboidea, Step. (olim.) H. ii. 128, 1829.

# 109. SPÆLOTIS.

Spælotis, Bois. I. M. 2 ed. 106, 1840. Graphiphora, p., Step. H. ii. 129, 1829.

# в. Внулста, Нив. V. 209, 1816.

1. Spælotis Ashwobthii. The Welsh Rustic. B. M. Spælotis Vallesiaca, Stainton, Ent. Annual, 1854, p. 41, front f. 2, (an H.-Schæff,?)

Agrotis Ashworthii, Doubleday, Zool. 4749, (July 1855).

2. SPELOTIS CATALEUCA. The Northern Rustic. B. M.

Noctua cataleuca, Bois.—Ann. E. S. Fr. ii. 377, t. 14, f. 2, 1833.

Graphiphora renigera, Step. H. ii. 129, 1829. West. & H. M. i. 126, t. 25, f. 2, 3, 1842.

Phalæna-N. lucernea, Linn. P F. ii. No. 1152, 1761.

# b. Ogygia, p., Hüb. V. 225, 1816.

3. SPÆLOTIS RAVIDA. The Stout Dart.

B. M.

Noctua ravida, Schiff. (W. V. 80, 1776). Phalæna-N. obelisca, View. T. V. ii. 60, 1790, Phalæna-N. obscura, Brahm. I. K. ii. 191, 1790.

Noctua crassa, Haw, L. B. 220, 1810.

Graphiphora crassa, Step. H. ii. 130, 1829. West. & H. M. i. 127, t. 25, f. 5, 1842.

3. Noctua obducta, Esp. S. iv. (452), t. 142, Noct. 63, f. 4 1788-96.

 Noctua austera, Esp. S. iv. (452), t. 142, Noct. 63, f. 5, 1788-96.

Var. a. Noctua bigramma, Esp. S. iv. (490), t. 150, Noct. 71, f. 2, 1788—97.

# c. Epipsilia, Hüb. V. 210, 1816.

4. SPELOTIS PYROPHILA. The Dotted Rustic.

B. M.

Noctua pyrophila, Schiff. (W. V. 71, 1776). Graphiphora pyrophila, Step. H. ii. 130, 1829. West, & H.

M. i. 126, t. 25, f. 4, 1842. Phalana-N. simulans, Hufn-(Berl. M. iii. 396, 1769?)

Noctua tristis, Fub. E. S. iii. 2, 118, 1794.

Noctua radicea, Esp. S. iv. (453), t. 143, Noct. 64, f. 1-3, 1788-96.

5. *Spelotis distinguenda. The Allied Rustic. B. M.

Spælotis distinguenda, Step. MSS.

Graphiphora latens ? Step. H. ii. 129, 1829. Wood, I. E. t. 9, f. 155, 1836,

# d. Exercis, p., Hab. V. 225, 1816.

# 6 Segious appra The Double Dart.

B.M.

Northe augus, Feb. M. ii. 152, 1747.

Graphiphora angut, Step. H. S. 131, 1829. West. & H. M. i. 127, L. 25, L. 6, 7, 1842.

Phalma-N. animilam, Bork. E. S. iv. 209, 1792, Phalma-N. Omega, Bork. F. S. iv. 205, 1792.

North Omega, Esp. S. iv. (300), L 131, Nort. 52, £ 2, 1788

Noctua cinetina, Her. (Pr. 17, 1802).

# 109a OPIGENAL

Opigena, Bois. I. M. red. 103, 1840.

# J. OPIGENA TENNICA. The Beautiful Dart.

Nocina Tennica, Fame.—Eure. Bell. S. J. M. 38, 1837. H.-Schaff, t. 30, L. 105, 107, 1846. Opigena Tennica, Step. C. & B. 310, 1850.

#### 110 GRAPHIPHORA.

Graphiphora, Och. (S. iv. 68, 1816, 3). Noctua, Trest. S. v. 1, 206, 1825.

# a. Amathes, p., Hub. V. 222, 1816, 9.

# 1. GRAPHIPHONA BASA. The Dotted Clay.

B. M.

Noctua baja, Schiff. (W. V. 77, 1776).

Graphiphora baja, Step. H. ii. 134, 1829. West. & H. M. i. 130, t. 25, f. 8, 9, 1842. Var. a. Noctua tricomma, Esp. S. iv. (603), t. 167, f. 6, 1789—99.

# b. DIARSIA, Hub. V. 222, 1816.

# 2. GRAPHIPHORA BRUNNEA. The Purple Clay.

B. M

Noctua brunnea, Schiff. (W. V. 77, 1776).

Graphiphora brunnes, Step. H. ii. 131, 1829. West. & H. M. i. 128, L. 25, f. 11, 1842.

Phalana-N. Fragraria, Borh. E. S. iv. 497, 1792.

Noctua lucifers, Esp. S. iv. (453), t. 142, Noct. 63, f. 6, 1788-96.

3. GRAPHIPHORA FESTIVA. The Ingrailed Clay.

B. M.

Noctua festiva, Schiff. (W. V. 77, 1776).

Graphiphora festiva, Step. H. ii. 134, 1829. West. & H. M. i. 131, t. 26, f. 1, 1842.

Phalæna-N. Primulæ, Bork. E. S. iv. 511, 1792. Noctua mendica, Fab. E. S. iii. 2, 93, 1794.

Var. a. Noctua subrufa, Haw. L. B. 227, 1810.

Var. b. Noctua Dahlii, Goda. L. F. v. 189, t. 62, f. 1, 2, 1824.

4. GRAPHIPHORA DAHLII. The Barred Chestnut.

В. М.

Noctua Dahlii, Hüb. No. t. 99, f. 465, 466, 1810. Graphiphora Dahlii, Step. H. ii. 134, 1829. West. & H. M. i. 131, t. 25, f. 12, 1842.

Noctua erythrocephala, Haw. L. B. 227, 1810. Var. a. Graphiphora candelisequa, Step. H. ii. 132, 1829.

5. GRAPHIPHORA RUBI. The Small Square-spot.

B. M.

Noctua Rūbi, View. T. V. ii. 57, t. 3, f. 5, 1790. Phalæna-N. xanthographa, Brahm. I. K. ii. 112, 1791. Phalæna-N. bella, Bork. E. S. iv. 605, 1792. Graphiphora bella, West. & H. M. i. 132, t. 26, f. 6, 1842. Noctua quadratum, Hūb. No. t. 101, f. 447, §, 1810. Noctua punicea, Haw. L. B. 228, 1810. Graphiphora punicea, Step. H. ii. 135, 1829.

# c. MEGASEMA, Hub. V. 222, 1816.

 GRAPHIPHORA RHOMBOIDEA. The Square-spotted Clay. B. M. Noctua rhomboidea, Esp. S. iv. (485), t. 149, Noct. 70, f. 3, 1789—97.

Noctua stigmatica, Hüb. No. t. 100, f. 470, 471, 1810. Graphiphora tristigma? Step. H. ii. 132, 1829. West. & H. M. i. 129, t. 25, f. 10, 1842.

7. GRAPHIPHORA DITRAPEZIUM.* Triple-spotted Clay.

Phalæna-N. ditrapezium, Bork. E. S. iv. 515, 1792.

Noctua ditrapezium, Hüb. No. 1. 24, f. 113, \$, 1798, t. 100, f. 472, \$, 1810.

Graphiphora tristigma, Treit. S. v. 1, 243, 1825.

Graphiphora Sigma, var., Goda. L. F. v. 176, t. 71, f. 3,* 1825.

8. Graphiphora Triangulum, Hüfn.—(Berl. M. iii. 306, 1769).
Graphiphora triangulum, Step. H. ii. 133, 1829. West. & H.
M. i. 130, t. 26, f. 3, 1842.
Noctua ditrapezium, Schiff. ? (W. V. 312, 1776).
Noctua Sigma, Hüb. No. t. 106, f. 597, 1815?

9. Graphiphora C.-Nigrum, Linn. S. Nat. i. 516, 1758.
Graphiphora C.-nigrum, Linn. S. Nat. i. 516, 1758.
Graphiphora C.-nigrum, Step. H. ii. 136, 1829. West. & H. M. i. 132, t. 26, f. 4, 5, 1842.
Noctua triangulum, Rotten.—Naturf. ix. 126, 1784?
Noctua gothica, var., Esp. S. iii. 383, t. 76, f. 3, 1785.

# d. EUGRAPHE, p., Hüb. V. 224, 1816.

Phalæna-N. Nun-atrum, Bork. E. S. iv. 495, 1792.

- Graphiphora Depuncta. The Plain Clay.
   Phalæna-N. depuncta, Linn. F. S. ii. No. 1214, 1761.
   Graphiphora depuncta, Step. H. ii. 133, 1829. West. & H. M. i. 130, t. 26, f. 14, 1842.
   Noctua mendosa, Hüb. No. t. 26, f. 120, 1798. Id. t. 107, f. 502, 1811.
- Graphiphora Glareosa. The Autumnal Rustic. B. M.
   Noctua glareosa, Esp. S. iv. (387), t. 128, Noct. 49, f. 3, 1788—95.
   Graphiphora glareosa, Step. H. ii. 159, t. 21, f. 1, 1829.
   Noctua Hebraica, Hüb. No. t. 140, f. 642, 643, 1816.
   Graphiphora I-geminum, Dup. L. F. vi. 80, t. 77, f. 6, 1826.

# e. OCHROPLEURA, Hüb. V. 223, 1816.

GBAPHIPHORA PLECTA. The Flame Shoulder. B. M. Phalæna-N. plecta, Linn. F. S. ii. No. 1216, 1761.
 Graphiphora piecta, Step. H. ii. 136, 1829. West. & H. M. i. 133, t. 26, f. 7, 8, 1842.

# 111. CERASTIA.

Cerastia, p., Step. MSS. Cerastis, p., Hüb. V. 228, 1816. 1. CERASTIA LEUCOGRAPHA. The Early Chestnut.

B. M.

Noctua leucographa, Hüb. No. t. 124, f. 572, 1814? Noctua cervina, Hüb. (V. 228, 1816). Var. α. Noctua Lepetitii, Bois. Ic. t. 83, f. 2, 1835.

#### 112. LYCOPHOTIA.

Lycophotia, Hub. V. 215, 1816. Scotophila, Step. H. iii. 18, 1829. Chersotis, +++, Bois. I. M. 2 ed. 103, 1840.

1. LYCOPHOTIA PORPHYREA. The True Lover's Kuot.

B. M.

Noctua porphyrea, Schiff. (W. V. 83, 1776).
Scotophila porphyrea, Step. H. iii. 19, 1829.
Phalæua-N. varia, Vill. E. ii. 276, 1789.
Phalæna birivia, Bork. E. S. iv. 206, 1792.
Noctua picta, Fab. E. S. iii. 2, 91, 1794.
Noctua concinna, Esp. S. iv. (500), t. 152, Noct. 73, f. 1, 1789—97.
Phalæna Ericæ, Don. B. I. x. 93, t. 360, f. 1, 1801.

#### Sub-F. II. ORTHOSIDI.

Orthosidi, Guén.-Ann. S. E. Fr. viii. 473, 1839.

#### 113. SEMIOPHORA.

Semiophora, Step. (Cat. ii. 70, 1829). Id. H. ii. 138, 1829. Episema, p., Hub. V. 224, 1816. Tæniocampa, p., Guén.—Ann. S. E. Fr. viii. 483, 1839.

Semiophora gothica, Linn. S. Nat. i. 516, 1758.
 Semiophora gothica, Step. H. ii. 138, 1829. West. & H. M. i. 134, t. 27, f. 1, 1842.
 Noctua Nun-atrum, Schiff. (W. V. 78, 1776).

Phalæna-N. C. nigrum, Vill. E. ii. 183, 1789. Var. a. Phalæna sigma, Don. B. I. xvi. 61, t. 562, 1813.

# 114. PANOLIS.

Panolis, Hüb. V. 214, 1816. Achatin, Cur. B. E. iii. fo. 117, 1826. Trachea, Guén.—Ann. E. S. Fr. viii. 475, 1839. Doub. (L. 8, 1848).

1. PANOLIS PINIPERDA. The Pine Beauty.

B. M.

Noctua piniperda, Köb. Forl. P. 51, t. 1-3, 1786.

Achatia piniperda, Step. H. iii. 19, 1829.

Noctua flammea, Schiff. ? (W. V. 87, 1776).

Noctun telifera, Payk.—Act. Holm. xlviii, 58, t. 2, f. 2, 3, 1786,

Noctua spreta, Fab. M. ii. 124, 1787. Cur. B. E. iii. t. 117. 1826.

Phalæna-N. Pini, Vill. E. ii. 278, 1789.

### 115. GLÆA.

Glwa, Step. (Cat. ii. 76, 1829). Id. H. ii. 159, 1829. Cerastis, p., Hüb. V. 228, 1816. Twniocampa, p., Guén.—Ann. S. E. Fr. viii, 480, 1839.

1. GLEA RUBRICOSA. The Red Chestnut.

B. M.

Noctua rubricosa, Schiff. (W. V. 77, 1776). Glæa rubricosa, Step. H. ii. 160, 1829. Phalæna-N. pilicornis, Bork. E. S. iv. 536, 1792.

Phalæna-N. phicornis, Bork, E. S. iv. 536, 1792. Noctua mucida, Esp. S. iv. (482), t. 148, Noct. 69, f. 4, 1789

-97. Noctua rufa, Haw. L. B. 232, 1810. Hatchett.—Ent. Tr. i. 244, t. 5, fig. sup. 1810.

Var. a. Noctua mixta, Hüb. No. t. 109, f. 509, 1812.

# 116. ORTHOSIA.

Orthosia, Och.—Hüb. V. 228, 1816. Tæniocampa, Guén.—Ann. E. S. Fr. viii, 477, 1839.

# a. TÆNIOCAMPA, Guén. ut supra.

1. ORTHOSIA INSTABILIS. The Clouded Drab.

B. M.

Noctua instabilis, Schiff. (W. V. 76, 1776). Orthosia instabilis, Step. H. ii. 140, 1829. West. & H. M. i. 134, t. 27, f. 2-4, 1842.

Bombyx fuscatus, Haw. L. B. 122, 1803.

Var. a. Nectua contracta, Esp. S. iv. (496), t. 151, Noct. 72, f. 2, 1789-97.

Var. b. Noctua trigutta, Esp. ? S. iv. (474), t. 147, Noct. 68, f. 4, 1789—97. West. & H. M. l. c. f. 3.

Bombyx nebulosus, Haw, L. B. 120, 1803.

Var. c. Bombyx subsetaceus, Haw. (Pr. 9, 1802). Id. L. B. 120, 1803.

Var. d. Bombyx angusta, Haw. L. B. 122, 1803.

Var. e. Noctua firma, Hub. ? No. t. 147, f. 676-677, 1816.

Var. f. Orthosia confluens, Step. MSS.

2. ORTHOSIA OPIMA. The Northern Drab.

B. M.

Noctua opima, Hib. No. t. 90, f. 424, 1806. Orthosia biannularis, Cur. P (Gu. i. 147, 1830).

3. ORTHOSIA POPULETI. The Lead-coloured Drab. B. M.

Noctua Populeti, Fab. M. ii. 130, 1787.

Noctua donasa, Esp. ? S. iii. 264, t. 52, f. 7, 1784?

Bombyx subplumbeus, Haw. L. B. 121, 1803.

Orthosia gracilis, Step. H. ii. 141, 1829. Wood, I. E. t. 10, f. 173.

Orthosia ocularis, Frey. B. i. 168, t. 95, f. 2, 1832.

Var. a. Orthosia intermedia, Step. H. ii. 140, 1829. Wood, I. E. t. 10, f. 172.

4. ORTHOSIA GRACILIS. The Powdered Quaker.

B. M.

Noctua gracilis, Schiff. (W. V. 76, 1776). Noctua collinita, Esp. S. iv. (505), t. 152, Noct. 73, f. 6, 1789 —97.

Bombyx sparsus, Haw. (Pr. 9, 1802). Id. L. B. 122, 1803. Orthosia sparsa, Step. H. ii. 147, 1829. West. & H. M. i. 136, t. 28, f. 12, 1842.

Var. a. Phalmaa-N. lepida, Bork. E. S. iv. 600, 1792.

Var. b. Orthosia pallida, Step. H. ii. 143, 1829.

5. ORTHOSIA MUNDA. The Twin-spotted Quaker.

B. M.

Noctua munda, Schiff. (W. V. 76, 1776). Orthosia munda, Step. H. ii. 141, 1829. West. & H. M. i. 135, t. 27, f. 6, 1842.

Phalæna-N. gemina, var., Bork. E. S. iv. 705, 1792. Noctua munda (Lota), Hüb. No. t. 35, f. 166, 1799. Bombyx geminatus, Haw. L. B. 121, 1803.

Var. a. Bombyx bimaculatus, Haw. L. B. 121, 1803.

# b. CUPHANOA, Hüb. V. 230, 1816.

# 6. ORTHOSIA STABILIS. The Common Quaker.

B. M.

Noctua stabilis, Schiff. (W. V. 76, 1776). Orthosia stabilis, Step. H. ii. 143, 1829.

West. & H. M. i.

Noctua Cerasi, Fab. ? M. ii. 146, 1787.

137, t. 28, f. 1, 1842.

Var. a. Bombyx junctus, Haw. (Pr. 9, 1802). Id. L. B. 123, 1803. Var. b. Noctua rufannulata, Haw. L. B. 242, 1810. Var. c. Noctua pallida, Haw. L. B. 242, 1810.

# c. Monima, Hüb. V. 229, 1816.

### 7. ORTHOSIA MINIOSA. The Blossom Underwing.

B. M.

Noctua miniosa, Schiff. (W. V. 88, 1776). Orthosia miniosa, Step. H. ii. 144, 1829. West. & H. M. i. 137, t. 28, f. 2, 3, 1842.

Noctua rubricosa, Esp. S. iii. 381, t. 75, f. 3, 1785. Noctua serratina, Haw. (Pr. 15, 1802).

# 8. ORTHOSIA CRUDA. The Small Quaker.

B. M.

Noctua cruda, Schiff. (W. V. 77, 1776). Orthosia cruda, Step. H. ii. 144, 1829. West. & H. M. i. 137, t. 27, f. ii. t. 28, f. 12, 1842.

Noctua pulverulenta, Esp. S. iii. 386, t. 76, f. 5, 6, 1785, Noctua ambigua, Hub. No. t. 36, f. 173, 1799.

Bombyx nanus, Haw. (Pr. 9, 1802). Id. L. B. 124, 1803.

Var. a. Noctua pusilla, Haw. L. B. 124, 1803.

Orthosia pusilla, Step. H. ii. 145, 1829. West. & H. M. i. 138, t. 27, f. 10, 1842.

# d. ORTHOSIA, Guén, -- Ann. S. E. Fr. viii. 480, 1839.

# 9. ORTHOSIA LOTA. The Red-line Quaker.

B. M.

Phalæna-N. Lota, Linn, F. S. ii. No. 1137, 1761. Orthosia Lota, Step. H. ii. 147, 1828. West. & H. M. i. 137, t. 28, f. 9, 1842. Phalæna-N. Hippophaës, Vill. E. ii. 178, 1789.

Noctua Lota (munda), Hüb. No. 35, f. 167, 1799.

B. M.

ORTHOSIA MACILENTA. The Yellow-line Quaker.
 Noctua macilenta, Hüb. No. t. 89, f. 418, 1806.
 Orthosia macilenta, Step. H. iii. 68, 1829. West. & H. M. i. 140, t. 28, f. 9, \$\frac{3}{5}\$, 1842.
 Noctua flavilinea, Haw. L. B. 243, 1810.
 Orthosia flavilinea, Step. H. ii. 148, t. 19, f. 2, 1829.

e. CARADRINA, p., Hüb. V. 230, 1816. Orthosia, p., Guén.—Ann. S. E. Fr. viii. 480, 1839.

ORTHOSIA? NEGLECTA. The Neglected Rustic.
 Noctua neglecta, Hüb. No. t. 34, f. 160, 1799.
 Segetia neglecta, Step. H. ii. 154, t. 21, f. 2, 1829.
 Var. a. Noctua lavis, Haw. L. B. 207, 1810.

ORTHOSIA? SOBRINA. The Scotch Rustic.
 Nociua sobrina, Boisd. Guén. Spec. gen. V. 335. Dup. Suppl. iv. pl. 69, f. 5. Herr.-Schaff. 127—129.

13. ORTHOSIA? CONGENER. The Allied Rustic. B. M.
Noctua congener, Hüb. No. t. 181, f. 862, 1834?
Var. a. Caradrina iners, Treit. S. v. 2, 271, 1825.
Var.? b. Noctua suspecta, Hüb. No. t. 138, f. 633, 1816.

ORTHOSIA? HYPERBOREA?* The Mountain Drab.
 Hadena hyperborea? Dalm. in litt. P Zett. I. L. 938, 1840.
 Agrotis alpina, West. & H. M. i. 118, t. 23, f. 13, 1842.

f. OERHODIA, p., Hüb. V. 231, 1816.

ORTHOSIA? RUTICILLA.* The Reddish Drab.
 Noctua ruticilla, Esp. S. iv. (525), t. 157, Noct. 78, f. 1, 1789
 —98.
 Noctua Serpylli, Hüb. No. t. 104, f. 488, 3, 489, \$\varphi\$, 1811.

### 117. ANCHOCELIS.

Anchoseelis, Guén.—Ann. S. E. Fr. viii. 483, 1839. Anthocelis, Doub.—(Entom. 378, 1842). Anchoseelis (pro Anchocelis), Step. B. & H. 84, 185.

### a. AMATHES, p., Hub. V. 222, 1816.

B. M.

1. Anchocelis Litura. The Brown-spot Pinion.

Phalæna-N. Litura, Linn. F. S. ii. No. 1213, 1761.

Orthosia Litura, Step. H. ii. 145, 1829. West. & H. M. i. 138, t. 28, f. 4, 1842.

Noctua polluta, Esp. S. iv. (383), t. 127, Noct. 48, f. 5, 1788
-95.

Noctua costina, Haw. (Pr. 15, 1802).

Var. a. Phalæna-N. depuncta, Bork. E. S. iv. 528, 1792. Var. b. Orthosia ornatrix, Frey. B. i. 167, t. 95, f. 1, 1832.

# b. AGROCHOLA, Hüb. V. 229, 116.

2. ANCHOCELIS PISTACINA. The Beaded Chestnut. B. M.

Noctua Pistacina, Schiff. (W. V. 77, 1776).

Orthosia Pistacina, Step. H. ii. 146, 1829. West. & H. M. i. 138, t. 28, f. 5-8, 1842.

Noctua serina, Esp. S. iv. (522), 156, Noct. 77, f. 1, 2, 1789
-98.

Noctua sexpunctina, Haw. (Pr. 5, 1802).

Noctua Lychnidis, Dup. L. F. vi. 113, t. 80, f. 5, 1826.

Var. a. Noctua Lychnidis, Fab. E. S. iii. 2, 45, 1794.

Noctua canaria, Esp. S. iv. (524), t. 156, Noct. 77, f. 5, 6, 1789-98.

Phalæna lineola, Don. B. I. x. 94, t. 360, f. 2, 1801.

Var. b. Noctua Shœnobæna, Esp. S. iv. (525), t. 157, Noct. 78, f. 1, 2, 1789—98.

Noctua spherulatina, Haw. (Pr. 13, 1802).

Var. c. Noctua rubetra, Esp. S. iv. (523), t 156, Noct. 77, f. 3, 4, 1789-98.

Noctua ferrea, Haw. L. B. 231, 1810.

Var. d. Noetua venosa, Haw. L. B. 232, 1810.

3. Anchocelis Lunosa. The Lanar Underwing. B. M.

Noctua lunosa, Haw. L. B. 230, 1810.

Orthosia lunosa, Cur. B. E. v. i. 237, 1828. Step. H. ii. 147, 1829

Orthosia subjecta, *Dup. L. F. Sup.* iii. 295, i. 27, f. 3, 1830? Anchocelis Agrotoides, *Guén.—Ann. S. E. Fr.* viii. 486, 1830. Orthosia humilis, *West. & H. M.* i. 133, t. 27, f. 7, 8, 1842.

Var.? a. Noctua neurodes, Hub. No. t. 123, f. 568, 1814.

### 118. DASYCAMPA.

Dasycampa, *Guén.*—*Ann. S. E. Fr.* vi. 224, 1837. Orrhodia, p., *Hüb. V.* 231, 1816. Omalosoma, *Guén.* (olim.).

1. DASYCAMPA RUBIGINEA. The Dotted Chestnut. B. M.

Noctua rubiginea, Schiff. (W. V. 86, 1776). Glæa rubiginea, Step. H. ii. 161, 1829.

Noctua tigerina, Esp. S. iv. (331), t. 123, Noct. 44, f. 3, 4, 1788-92.

Dasycampa rubiginea, West. & H. M. i. 148, t. 30, f. 3, 4, 1842.

Var. a. Phalæna-N. sulphurago, Bork. E. S. iv. 679, 1792.

#### 119. ORRHODIA.

Orrhodia, Hüb. V. 231, 1816. Cerastis D., Och. (S. iv. 84, 1816).

1. ORRHODIA VACCINII. The Chestnut.

B. M.

Phalæna-N. Vaccinii, Linn. F. S. ii. No. 1212, 1761. Glæa Vaccinii, Step. H. ii. 161, 1829. West. & H. M. i. 148, t. 30, f. 5, 6, 1842.

Var. a. Noctus polita, Schiff. (W. V. 85, 1776).

Glæa polita, Step. H. ii. 162, 1829. Wood, I. E. t. 11, f. 212, 1835.

Var. b. Noctua spadicea, Haw. L. B. 233, 1810.
Glæa spadicea, Wood, I. E. t. 11, f. 210, 1835.

2. ORRHODIA LIGULA. The Dark Chestnut.

B. M.

Noctua Ligula, Esp. S. iv. (595), t. 166, Noct. 87, f. 3, 1789

—99.

Var. a. Noctua spadicea, Hüb. No. t. 37, f. 179, 1799.
Glæa spadicea, Step. H. ii. 162, 1829.

Noctua castanea, Marsh.—Haw. (Pr. 15, 1802).

Var. b. Noctua subnigra, Haw. L. B. 234, 1810.
Glæa subnigra, Step. H. ii. 162, 1829, 5. Cur. B. E. vi. t.
268, 1829, 7.

 OBRHODIA ERYTHROCEPHALA.* The Red-headed Chestnut. Noctua erythrocephala, Schiff. (W. V. 77, 1776). Noctua Vaccinii, var., Esp. S. iv. (553), t. 162, Noct. 43, f. 1, 2, 1789—98.

Var. a. Phalena-N. Silene, Bork. E. S. iv. 741, 1792. Var. b. Noctua glabra, Schiff. (W. V. 114, 1776).

#### 120. EUPSILIA.

Eupsilia, Hüb. V. 231, 1816. Glæa, B. b., Step. H. ii. 163, 1829. Scopelosoma, Cur. B. E. xiv. fo. 635, 1837, 3. Mecoptera, Guén.—Ann. S. E. Fr. vi. 225, 1837, 7.

1. EUPSILIA SATELLITIA. The Satellite.

B. M.

Phalæna-N. Satellitia, *Linn. S. Nat.* ii. 855, 1767. Glæa Satellitia, *Step. H.* ii. 163, 1829. Scopelosoma Satellitia, *Cur. B. E.* xiv. t. 635, 1837. Var. a. Phalæna-N. transversa, *Hüfn.*—(*Berl. M.* iv. 418, 1770?)

#### Sub-F. III. AMPHIPYRIDI.

Amphipyridi, Guén .- Ann. E. S. Fr. vii. 107, 1838.

#### 121. AMPHIPYRA.

Amphipyra, Och. (S. iv. 70, 1816, 3). Treit. S. v. 1, 276, 1825. Pyrois, Hüb. V. 208, 1816, 9. Philopyra, A., Guén.—Ann. E. S. Fr. vii. 116, 1838.

Амрничка рукамиова. The Copper Underwing. В. М. Phalæna-N. pyramidea, Linn. S. Nat. i. 518, 1758.
 Амрhipyra pyramidea, Step. H. ii. 164, 1829. West. & H. M. i. 151, t. 30, f. 11, 12, 1842.

# 122. SCOTOPHILA.

Scotophila, Hüb. V. 209, 1816. Pyrophila, Step. (Cat. ii. 77, 1829). Id. H. ii. 164, 1829, Philopyra C., Guén,—Ann. E. S. Fr. vii. 116, 1838.

1. Scotophila Tragopogonis. The Mouse. B. M. Phalæna-N. Tragopogonis, Linn. F. ii. No. 1189, 1761. Pyrophila Tragopogonis, Step. H. ii. 165, 1829. Noctua Tragopoguis, Hüb. No. t. 8, f. 40, 1796?

Phalæna Tragopoginis, *Don. B. I.* vii. 18, t. 223, f. 2, 1798. Var. a. Noctua tetra, *Haw. L. B.* 164, 1810. Pyrophila tetra, *Step. H.* ii. 165, 1829. *Wood, I. E.* t. 11, f. 215, 1836.

### 123. NÆNIA.

Nænia, Step. (Cat. ii. 77, 1829). Id. H. iii. 165, 1829. Mormo, p., Och. (S. iv. 70, 1816). Hadena, t, Hüb. V. 216, 1816. Mania, p., Treit. S. v. 1, 294, 1825. Lemuris, Cur. (G. 148, 1831).

#### 1. NENIA TYPICA. The Gothic.

B. M.

Phalæna typica, Linn. S. Nat, i. 518, 1758. Nænia typica, Step. H. ii. 166, 1829. Lemuris typica, West. & H. M. i. 152, t. 30, f. 17, 18, 1842. Noctua venosa, Hüb. No. t. 13, f. 61, 1798? Noctua excusa, Esp. S. iv., Sup. 70, t. 197, Noct. 48, f. 1—3, 1802?

### Sub-F. IV. XYLINIDI.

Xylinidi, Guén.—Ann. E. S. Fr. viii. 500, 1839. Xylæuæ, Hüb. (V. 241, 1816).

#### 124. DYPTERYGIA.

Dypterygia, Step. (Cat. ii. 77, 1829). Id. H. ii. 167, 1829. Calliergis, p., Hüb. V. 224, 1816. Cloantha, p., Guén.—Ann. E. S. Fr. viii. 509, 1839. Luperina, p., Bois. I. M. 114, 1840.

# 1. DYPTERYGIA PINASTRI. The Bird's Wing.

B. M.

Phalæna-N. Pinastri, *Linn. F.* ii. No. 1188, 1761. Phalæna Pinastri, *Don. B. I.* x. 58, t. 347, f. 2, 1801. Dypterygia Pinastri, *Step. H.* ii. 168, 1829. Phalæna-N. Dyptreygia, *Hüfn.*—(*Berl. M.* iii. 300, 1769).

#### 125. APOROPHYLA.

Aporophyla, Guén.—Ann. E. S. Fr. x. 2, 46, 1841. Aporophila, Doub. (L. 27, 1850). Agrotis, p., Cur. (B. E. iii. fo. 165, 1827). Egira, p., Dup. C. 162, 1846. 1. APOROPHYLA AUSTRALIS. The Feathered Brindle. B. M.

Xylina australis, Bois. I. M. Add. 6, 1829. Frey. B. iii. 27, t. 209, f. 4, 1839.

Xylina? australis, Ramb.—Ann. E. S. Fr. i. 291, t. 9, f. 8, Q, 1832.

Agrotis, pascuea, Cur. (B. E. iii. fo. 165, 1827). West. & H. M. i. 123, t. 24, f. 2, 1842.

B. M.

#### 126. LITHOMOIA.

Lithomoïa, Hüb. V. 244, 1816. Lithomia, Cur. B. E. fo. 683, 1838. Cloantha, p., Guén.—Ann. E. S. Fr. viii. 509, 1839. Egira, p., Dup. C. 162, 1846.

 LITHOMOIA SOLIDAGINIS. The Golden-rod Brindle. Noctua Solidaginis, Hüb. No. t. 53, f. 256, 1800. Lithomia Solidaginis, Cur. B. E. xv. t. 683, 1838.

#### 127. XYLINA.

Xylina, Step. H. ii. 168, 1829.

LITHOPHANE, Hüb. V. 242, 1816.
 Asteroscopus, p., Bois. (I. M. 59, 1829).
 Egira, p., Dup. C. 162, 1846.

1. XYLINA PULLA. The Ash Shoulder-knot. B. M. Noctua pulla, Schiff. (W. V. 76, 1776).

Xylina pulla, Step. H. ii. 170, 1829. West. & H. M. i. 154, t. 31, f. 2, 1842.

XYLINA CONSPICILLARIS. The Silver Cloud.
 Phalæna-N. conspicillaris, Linn. S. Nat. i. 515, 1758.
 Xylina conspicillaris, Step. H. ii. 169, 1829. Wood, I. E. t. 11, f. 218, 1836.

Var. a. Phalana leuconota, Don. B. I. xiii. 44, t. 453, f. 3, 1808. Var. b. Xylina conspicillaris, West. & H. M. i. 154, t. 31, f. 1, 1842. Var. c. Noctua musicalis, Esp. S. iv. (478), t. 147, Noct. 68, f. 5, 1789—97.

Var. d. Noctua melaleuca, View. T. V. ii. 68, 1790. Dup. L. F. vii. t. 112, f. 6, 1826.

Phaluna-N. præusta, Brahm. I. K. ii. 55, 1791.

# b. XILINA, Dup. C. 163, 1846.

# XYLINA SEMIBRUNNEA. The Tawny Pinion.

B. M.

Noctua semibrunnea, Haw. L. B. 171, 1810. Xylina semibrunnea, Step. H. ii. 170, t. 21, f. 3, 1829. Noctua petrificata, Dup. P. L. F. vii. t. cxiii. f. 7, 1827. Xylina oculata, Germ. F. ix. f. 18, 1834.

### . XYLINA PETRIFICATA. The Pale Pinion.

B. M.

Noctua petrificata, Schiff. (W. V. 75, 1776). Xylina petrificata, Step. H. ii. 171, t. 23, f. 1, 1829. Phalæna-N. socia, Hufn.—(Berl. M. iii. 418, 1769). Noctua umbrosa, Esp. S. iv. (413), t. 133, Noct. 54, f. 5, 6, 1788—95. Noctua lithoxylen, Fab. & E. S. iii. 2, 123, 1793. Noctua petrificosa, Hüb. No. t. 49, f. 239, 1799.

# с. GRAPTOLITHA, Hüb. V. 243, 1816.

Rhizolitha, Cur.-Ent. M. i. 189, 1833.

5. XYLINA RHIZOLITHA. The Gray Shoulder-knot.

B. M.

Noctua rhizolitha, Schiff. (W. V. 75, 1776). Xylina rhizolitha, Step. H. ii. 170, 1829. Phalæna-N. ornithopus, Hüfn.—(Berl. M. iii. 304, 1769). Noctua Lambda, Haw. L. B. 181, 1810. Xylina Lambda, West. & H. M. i. 153, t. 31, f. 6, 1842.

# d. AXYLIA, p., Hüb. V. 242, 1816.

XYLINA PUTRIS. The Flame.

B. M.

Phalæna-N. putris, Linn. F. ii. No. 1187, 1761.

Xylina putris, Step. H. ii. 172, 1829. Wood, I. E. t. 11, f. 223, 1836.

Phalæna-N. subcorticalis, Hüfn.—(Berl. M. iii. 308, 1769).

Noctua lignosa, Hüb. No. t. 50, f. 245, 1799.

#### 128. CALOCAMPA.

Calocampa, Step. (Cat. ii. 79, 1829). Id. H. ii. 172, 1829. Axylia, p., Hüb. V. 242, 1816. 1. CALOCAMPA EXOLETA. The Sword Grass.

B. M.

Phalmna-N. exoleta, Linn. S. Nat. i. 515, 1758. Xylina exoleta, Cur. B. E. vi. t. 256, 1829, 4. Calocampa exoleta, Step. H. ii. 173, 1829, 5.

2. CALOCAMPA VETUSTA. The Red Sword Grass.

B. M.

Noctua vetusia, Hub. No. t. 97, f. 459, 1810. Calocampa vetusta, Step. H. ii. 174, 1829. Phalæna exoleta, Don. ? B. I. vi. 19, t. 287, 1797.

### Sub-F. V. APAMIDI.

Apamidi, Guén.—(Ann. E. S. Fr. x. 237, 1841).

#### 129. XYLOPHASIA.

Xylophasia, Step. (Cat. ii. 79, 1829. Id. H. ii. 174, 1829.

а. Septis, Hub. V. 167, 1816.

1. XYLOPHASIA LITHOXYLEA. The Light Arches.

B. M.

Noctua lithoxylea, Schiff. (W. V. 75, 1776). Xylophasia lithoxylea, Step. H. ii. 175, 1829. West. & H. M. i. 158, t. 32, f. 1, 1842.

Noctua sublustris, var., Esp. S. iv. (408), t. 123, Noct. 54, f. 2,

1788-95.

2. XYLOPHASIA SUBLUSTRIS. The Reddish Light Arches. B. M. Noctua sublustris, Esp. S. iv. (408), t. 133, Noct. 54, f. 1. 1788 - 95.Xylophasia sublustris, Step. H. ii. 175, 1829. West. & H. M.

i. 158, t. 32, f. 2, 1842. Noctua lithoxyles, Hub. No. t. 49, f. 240, 1799. Noctua musicalis, Dup. L. F. vii. 177, t. 113, f. 1, 1827.

3. XYLOPHASIA POLYODON. The Dark Arches. B. M. Phalæna-N. polyodon, Linn F. ii. No. 1219, 1761.

Xylophasia polyodon, Step. H. ii. 176, 1829. West. & H. M. i, 158, t. 32, f. 3, 1842.

Phalana-N. monoglypha, Hufn.-(Berl. M. iii. 308, 1769). Noctua radicea, Schiff. (W. V. 81, 1776).

Noctua occulta (monoglypha), Esp. S. iv. (405), t. 132, Noct 53, f. 3, 4, 1788-95.

4. XYLOPHASIA BUREA. The Clouded-bordered Brindle. B. M.

Noctua rurea, Fab. S. E. 618, 1775.

Xylophasia rurea, Step. H. ii. 176, 1829. West. & H. M. i. 159, t. 32, f. 4, 1842.

Noctua putris, Schiff. (W. V. 75, 1776).

Noctua luculenta, Esp. S. iv. (410), t. 133, Noct. 54, f. 3, 4, 1788-95.

Noctua epomina, Haw. (Pr. 18, 1802).

Var.? a. Xylina borealis,* Cur. ? (B. E. vi. fo. 256, 1829).

Var. b. Noctua combusta, Hüb. No. t. 79, f. 366, 1804?

Xylophasia combusta, Step. H. ii. 177, 1829. West. & H. M. i. 159, t. 32, f. 5, 1842.

Noctua Alopecurus, Esp. S. iv. (473), t. 147, Noct. 63, f. 3, 1789-97.

Var. c. Apamea aquila, Donz.—Ann. E. S. Fr. vi. 476, t. 18, f. 6, 1837.

# b. PARASTICHTIS, t., Hüb. V. 213, 1816.

5. XYLOPHASIA HEPATICA. The Clouded Brindle. B. M.

Phalma-N. hepatica, Linn. ? S. Nat. ii. 853, 1767.

Noctua characterea, Hub. No. t. 28, f. 133, 1798.

Xylophasia characterea, West. & H. M. i. 140, t. 32, f. 6, 7, 1842.

Noctua epomidion, Haw. (Pr. 18, 1802).

Xylophasia epomidion, Step. H. ii. 178, 1829.

Noctua Ypsilon, Scrib. B. ii. 128, 1791.

Var. a. Noctua hepatica, Dup. L. F. vii. t. 113, f. 4, 1827.

6. XYLOPHASIA SCOLOPACINA. The Slender Clouded Brindle: B. M.

Noctua scolopacina, Esp. S. iv. (394), t. 130, Noct. 51, f. 1, 1788-95.

Xylophasia scolopacina, Step. H. ii. 178, 1829. West. & H. M. i. 160, t. 32, f. 8, 1842.

Noctua abbrevina, Haw. (Pr. 18, 1802).

Noctua abbreviata, Haw. L. B. 170, 1810.

#### 130. HYPPA.

Hyppa, Dup. C. 161, 1846. Lithomoïa, p., Hüb. V. 244, 1816. 1. HYPPA RECTILINEA. The Clouded Brocade.

B. M.

Noctua rectilinea, Esp. S. iv. (379), t. 127, Noct. 48, f. 1, 1788

Xylophasia rectilinea, Step. H. ii. 178, 1829. West. & H. M. i. 160, t. 32, f. 9, 10, 1842.

### 131. HYDRÆCIA.

Hydræcia, Guén.—(Ann. S. E. Fr. x. 237, 1841). Diataraxia, p., Hüb. V. 219, 1816.

1, HYDRÆCIA LEUCOSTIGMA. The Crescent.

B. M.

Noctua lunina, Haw. (Pr. 19, 1802). Id. L. B. 209, 1810.

Var. a. Noctua fibrosa, Hub. No. t. 82, f. 385, 1804.

Apamea fibrosa, Step. H. iii. 7, 1829. West. & H. M. i. 176, t. 37, f. 1, 2, 1842.

#### 132. APAMEA.

Apamea, Och. (S. iv. 75, 1816). Treit. S. v. 81, 1825.

- a. APAMEA. Hydræcia, p., Guén .- (Ann. E. S. Fr. x. 237, 1841).
- I. APAMEA NICTITANS. The Golden Ear.

B. M.

Phalæna nictitans (oculea) Linn. F. ii. No. 1215, 1761. Apamea nictitans, Step. H. iii. 7, 1829. West. & H. M. i. 177, t. 37, f. 3, 4, 1843.

Noctua chrysographa, Schiff. (W. V. 313, 1776). Noctua cinerago, Fab. E. S. Sup. 445, 1795.

Noctua auricula, Haw. L. B. 240, 1810.

Var. a. Noctua erythrostigma, Haw. L. B. 240, 1810.

b. Parastichtis, p., Hüb. V. 213, 1816.
 Apamea, C., Guén.—Ann. E. S. Fr. vi. 335, 1837.

2. APAMEA UNANIMIS. The Uniform Rustic.

B. M.

Noctua Unanimis, Hüb. No. t. 120, f. 556, 1814. Apamea Unanimis, Step. (H. iii, 9, 1829). Noctua secalina, Haw. L. B. 210, 1810. Apamea secalina, Step. H, iii. 8, 1829. West. & H. M. i. 178, t. 37, f. 6, 1843. 3. APAMEA DIDYMA. The Common Rustic.

B. M.

Phalæna-N. didyma, Bork. E. S. iv. 465, 1792. Apamea didyma, Step. H. iii. 8, 1829.

Apamea oculea, West. & H. M. i. 177, t. 37, f. 7-9, 1843.

Var. a. Noctua oculea, Fab. S. E. 616, 1775.

Apamea oculea, Step. H. iii. 9, 1829. West. & H. l. c. f. 8. Noctua Phœbe, Marsh. MSS. (ina) Haw. (Pr. 18, 1802).

Var. b. Noctua leucostigma, Esp. S. iv. (542) t. 159, Noct. 80, f. 7, 1789—98.

Noctua lamda, View. P. T. V. ii. 81, 1790. Noctua nictitans, Hüb. No. t. 135, f. 619, 1816.

Apamea oculea, var., West. & H. l. c. f. 9. Var. c. Noctua lugens, Marsh. MSS. Haw. L. B. 212, 1810.

Var. d. Noctua secalina, Hub. No. t. 89, f. 420, 1806.

Var. e. Noctua I-niger, Haw. L. B. 211, 1810.

Apamea I-niger, Step. H. iii. 10, 1829. Wood, I. E. t. 12, f. 268, 1836.

Noctua didyma, Esp. ? S. iv. (378) t. 126, Noct. 47, f. 7, 1788-95.

Var. f. Noctua furca, Haw. L. B. 209, 1810.

Apamea furca, Step. H. iii. 10, 1829. Wood, I. E. t. 12, f. 271, 1836.

Var. g. Noctua rava, Haw. L. B. 209, 1810. Apamea oculea, West. & H. l. c. f. 7.

# c. Callierges, p., Hub. V. 244, 1816.

4. APAMEA OPHIOGRAMMA. The Double-lobed.

B. M.

Noctua ophiogramma, Esp. S. iv. Sup. 10, t. 182, Noct. 103, 1801?

Apamea ophiogramma, Step. H. iii. 11, 1829. West. & H. M. i. 178, t. 37, f. 10, 1843.

Noctua bilobina, Haw. (Pr. 18, 1802). Noctua biloba, Haw. L. B. 209, 1810.

# 133. MIANA.

Miana, Step. (Cat. ii. 86, 1829). Id. H. iii. 11, 1829.

a. Oligia, Hüb. V. 213, 1816.

1. MIANA STRIGILIS. The Marbled Minor.

B. M.

Phalæna-N. strigilis, Linn. S. Nat. i. 516, 1758.

Miana strigilis, Step. H. iii. 12, 1829. West. & H. M. i. 181, t. 38, f. 2-4, 1843.

Noctus præduncula, Schiff. (W. V. 89, 1776). Var. a. Noctus strigilis, Haw. L. B. 214, 1810. West. & H. l. c.

Var. b. Noetua latruncula, Schiff. (W. V. 89, 1776).

Miana latruncula, Step. H. iii. 13, 1829. Wood, I. E. t. 13.

Noctua ærata, Esp. S. iv. (468) t. 146, Noct. 67, f. 4-6. 1789-96.

Phalæna-N. meretricula, Bork. E. S. iv. 187, 1792.

Var. c. Noctua Æthiops, Haw. L. B. 215, 1810.

Miana Æthiops, Step. H. iii. 13, 1829. West. & H. l. c. f. 4.

2. MIANA FURUNCULA. The Cloaked Minor.

B. M.

Noctua furuncula, Schiff. (W. V. 89, 1776). Noctua humeralis, West. & H. M. i. 180, t. 38, f. 5-8, 1843.

Var. a. Phalæna-N. bicoloria, Bork. E. S. iv. 190, 1792.

Noctua humeralis, Haw. L. B. 215, 1810.

Miana humeralis, Step. H. iii. 14, 1829. West. & H. l. c. f. 5.

Var. b. Noctua erratricula, Hub. ? No. t. 115, f. 537, 1813.

Var. c. Noctua vinctuncula, Hüb.? No. t. 20, f. 96, 1798.

Var. d. Noctua terminalis, Haw. L. B. 215, 1810.

Miana terminalis, Step. H. iii. 14, 1829. Wood, I. E. t. 13, f. 278.

Var. e. Noctua rufuncula, Haw. L. B. 216, 1810.

Miana rufuncula, Step. H. iii. 14, 1829. West. & H. l. c. f. 9.

3. MIANA LITEROSA. The Rosy Minor.

B. M.

Noctua literosa, Haw. L. B. 213, 1810.

Miana literosa, Step. H. iii. 12, 1829. Wood, I. E. t. 13, f. 273.

Apamea suffuruncula, Och. (S. iv. 76, 1816). Treit. S. v. 2, 97, 1825.

4. MIANA FASCIUNCULA. The Middle-barred Minor.

B. M.

Noctua fasciuncula, Haw. L. B. 215, 1810.

Miana fasciuncula, Step. H. iii. 15, 1829. West. & H. M. i. 181. t. 38, f. 10, 1845.

Var. a. Apamea rubeuncula, Donzel .- Ann. E. S. Fr. vii. 430, L. 12, f. 3, 4, 1838.

5. MIANA EXPOLITA.

B. M.

Miana expolita, Doubleday, in Stainton's Ent. Ann. 1855, p. 41.

#### 134. CELÆNA.

Celmna, Step. (Cat. ii. 87, 1829). Id. H. iii. 15, 1829.

1. CELENA HAWORTHII. Haworth's Minor.

B. M.

Apamea Haworthii, Cur. B. E. vi. t. 260, 1829. Celæna Haworthii, Step. H. iii. 16, 1829. Noetua movio, Evers.—Bull. S. I. Mosc. iii. 550, 1842. Noetua erupta, Frey. B. v. 150, t. 472, f. 1, 2, 1845. Noetua digramma, — MSS.?

Var. a. Noctua hibernica, Haw. MSS.

Celwna hibernica, Step. H. iii. 17, 1829. Wood, I. E. t. 13, f. 285.

Var. b. Celæna lancea? Step. H. iii. 18, 1829. Wood, I. E. t. 13, f. 284.

Var. c. Apamea tripuncta, (Cur. B. E. vi. fo. 260, 1829).
Noctua leucographa, Esp. J—Steph. (Cat. No. 6249, 1829).
Celæna leucographa, Step. (Cat. l. c. supra).

### 135. HAMA.

Hama, Step. (Cat. ii. 84, 1829). Id. H. iii. 4, 1829. Luperina, p., Bois. I. M. 2 ed. 1840.

a. OGYGIA, p., Hub. V. 224, 1816.

1. HAMA BASILINEA. The Rustic Shoulder-knot.

B. M.

Noctua basilinea, Schiff. (W. V. 78, 1776). Hama basilinea, Step. H. iii. 5, 1829. West. & H. M. i. 170, t. 35, f. 7, 8, 1842. Noctua nebulosa, View. T. V. ii. 55, 1790.

b. Exarnis, p., Hub. V. 225, 1816.

2. HAMA TESTACEA. The Flounced Rustic.

B. M.

Noctua testacea, Schiff. (W. V. 81, 1776). Hama testacea, Step. H. iii. 5, 1829. West. & H. M. i. 171, t. 35, f. 9, 1842. Noctua lunatostrigata, Haw. L. B. 194, 1810. Var. a. Noctua unca, Haw. L. B. 194, 1810. Var. b. Noctua X.-notata, Haw. L. B. 194, 1810.

3. HAMA YPSILON. The Dingy Shears.

B. M.

Noctua Ypsilon, Schiff. (W. V. 78, 1776). Noctua corticea, Esp. S. iv. (463), t. 146, Noct. 66, f. 1, 2, 1789—98. Noctua fissipuncta, Haw. L. B. 197, 1810.

Orthosia Upsilon, Cur. (B. E. v. fo. 237, 1828). Step. H. ii. 149, 1829. West. § H. M. i. 140, t. 27, f. 12, 1842.

с. Raphta, p., Hüb. V. 212, 1816.

4. HAMA CONNEXA. The Union Rustic.

B. M.

Phalæna-N. connexa, Bork. E. S. iv. 360, 1792. Hama connexa, Step. H. iii. 6, 1829. West. & H. M. i. 171, t. 35, f. 10, 1843. Noetua pabulatricula, Scrib. B, iii. 259, 1793. Noctua Elota, Hüb. No. t. 98, f. 462, 1810.

d. Diataraxia, p., Hüb. V. 219, 1816.

5. HAMA SORDIDA. The Large Nutmeg.

B. M.

Phalæna-N. sordida, Bork. E. S. iv. 578, 1792. Noctua contigua, Haw. L. B. 192, 1810. Noctua anceps, Hüb. No. t. 102, f. 484, 1811. Apamea infesta, Och. (S. iv. 76, 1816). Treit. S. v. 2, 112, 1825. Hama aliena, Step. H. iii. 4, 1829. West. & H. M. i. 170, t. 35, f. 6, 1843.

e. THOLERA, p., Hub. V. 214, 1816.

6. HAMA FURVA. The Dusky Brocade.

B. M.

Noctua furva, Schiff. (W. V. 81, 1776). Mamestra anceps? West. & H. M. i. 175, t. 36, f. 15, 1842.

### 136, CRYMODES.

Crymodes? Guén.—(Ann. E. S. Fr. x. 238, 1841). Chera, p., Hüb. V. 211, 1816. 1. CRYMODES TEMPLI.* The Brindled Ochre.

Noctua Templi, Thunb. I. S. iv. 56, 1792.
Polia? Templi, Step. H. iii. 31, t. 36, f. 1, \$\frac{1}{3}\$.

B. M.

B. M.

### Sub-F. VI. HADENIDI.

Hadenidi, Guén .- Ann. E. S. Fr. vii. 201, 1838.

### 137. EUPLEXIA.

Euplexia, Step., (Cat. ii. 84, 1829). Id. H. iii. 3, 1829. Trigonophora, p., Hüb. V. 217, 1816. Aplecta B., Guén.—Ann. E. S. Fr. vii. 220, 1838.

Euplexia Lucipara. The Small Angleshades.
 Phalæna-N. lucipara, Linn. S. Nat. i. 518, 1758.
 Euplexia lucipara, Step. H. iii. 3, 1829.
 Phlogophora lucipara, Cur. B. E. xiii. t. 619, 1836.
 Phalæna-N. dubia, Hüfn.—(Berl. M. iii. 404, 1769).
 Noctua flavo-macula, Fab. M. ii. 117, 1787.

#### 138. MAMESTRA.

Mamestra, Och. (S. iv. 76, 1816, 3). Treit. S. v. 2, 127, 1825.

a. MELANCHRA, Hüb. V. 207, 1816.

MAMESTRA PERSICARIE. The Dot.
 B. M.
 Phalæna-N. Persicariæ, Linn. F. ii. No. 1208, 1761.
 Mamestra Persicariæ, Step. H. ii. 196, 1829. West. & H. M.

i. 175, t. 36, f. 11, 12, 1843. Phalæna-N. Sambuci, Hüfn. (Berl. M. iii. 308, 1769).

b. Mamestra, Hüb. V. 214, 1816, 9.

2. MAMESTRA PISI. The Broom Moth. B. M.

Phalæna-N. Pisi, Linn. S. Nat. i. 517, 1758. Mamestra Pisi, Step. H. ii. 192, 1829. West. & H. M. i. 172, t. 36, f. 2, 3, 1843.

Aber.? Mamestra splendens, Step. H. ii. 192, 1829.

## c. Diataraxia, p., Hüb. V. 219, 1816.

B. M. 3. Mamestra oleracea. The Bright-line Brown-eye.

Phalæna-N. oleracea, Linn. S. Nat. i. 517, 1758.

Mamestra oleracea, Step. H. ii. 193, 1829. West. & H. M. i.

173, t. 36, f. 4, 5, 1843. Phalana-N. monstrosa, Vill. E. ii. 248, 1789.

Phalana-N. Spinachia, Bork, E. S. iv. 454, 4792.

4. MAMESTRA SUASA. The Dog's Tooth.

B. M.

Noctua suasa, Schiff. (W. V. 83, 1776). Mamestra suasa, Step. H. ii. 193, 1829. West. & H. M. i. 173, t. 36, f. 6, 1843.

Phalena-N. W-Latinum, Hufn.—(Berl. M. iii. 294, 1769).

Noctua dissimilis, Knoch, B. i. 57, 1781. Noctua deus-canis, Haw. L. B. 190, 1810.

Var. a. Noctua leucographa, Esp. S. iv. (491), t. 150, Noct. 71, f. 3, 1789-97.

5. MAMESTRA CHENOPODII. The Nutmeg.

B. M.

Noctua Chenopodii, Schiff. (W. V. 82, 1776). Mamestra Chenopodii, Step. H. ii, 195, 1829. West. & H. M. i. 175, t. 36, f. 13, 14, 1843.

Phalæna-N. Trifolii, Hufn .- (Berl. M. iii. 398, 1769).

Noetua verna, Esp. S. iv. (272), t. 117a, Noct. 38a, f. 3. 6, 1787-91.

Noctua saucia, Esp. S. iv. (505), t. 152, Noct. 73, f. 5, 1789 -97.

Noctua infraina, Haw. (Pr. 18, 1802). Var.? a. Mamestra cinereus,* Cur. (G. 150, 1831).

# d. HADENA, p., Hub. V. 216, 1816.

6. MAMESTRA NIGRICANS. The Dusky Nutmeg.

B. M.

Noctua nigricans, View. T. V. ii. 66, 1790. Mamestra nigricans, Step. H. ii. 193, t. 24, f. 12, 1829.

Noctua abjecta, Hub. No. t. 116, f. 539, 1813. Var. a. Noctua lunulina, Haw. (Pr. 19, 1802). Id. L. B. 192,

Graphiphora? lunulina, Step. H. ii. 130, 1829.

### e. BARATHRA, Hüb. V. 218, 1816.

MAMESTRA ALBICOLON. The White Colon.
 Noctua albicolon, Hüb. No. t. 117, f. 542, 543, 1813.
 Mamestra albicolon, Step. H. ii. 195, t. 24, f. 3, 1829.

MAMESTRA BRASSICÆ. The Cabbage Moth.
 Phalæna-N. Brassicæ, Linn. S. Nat. i. 516, 1758.
 Mamestra Brassicæ, Step. H. ii. 194, 1829. West. & H. M. i. 174, t. 36, f. 8, 9, 1843.
 Aber. Noctua albidilinea, Haw. L. B. 191, 1810.
 Mamestra albidilinea, Step. H. ii. 195, 1829.

### 139. HADENA.

Hadena, Schr. (F. B. ii. 2, 158, 1802). Hadena, p., Och. (S. iv. 72, 1816).

1789-96.

### a. ASTRAPETIS, Hüb. V. 218, 1816.

- *? 1. Hadena arctica. The Barred Arches. B. M. Hadena arctica, Bois. Ic.—teste Bois. (I. M. ii. 120, 1840). Noctua satura, Haw. L. B. 187, 1810. Hadena amica? Step. H. ii. 180, t. 21, f. 2, 1829.
- HADENA SATURA.* The Beautiful Arches.
   Noctua satura, Schiff: (W. V. 83, 1776). Hüb. No. t. 16, f. 75, 1798.
   Noctua porphyrea, Esp. S. iv. (465), t. 145, Noct. 66, f. 5,
- 3. Hadena assimilis. The Northern Arches. B. M. Hadena assimilis, Doub,—Zool, v. 1914, 1847.
- Hadena adusta, The Dark Brocade.
   Noctus adusta, Esp. S. iv. 483, t. 149, Noct. 70, f. 1, 2, 1789—97.
   Hadena adusta, Step. H. ii. 181, 1829. West. & H. M. i. 161, t. 33, f.,1, 1842.
   Noctus porphyrea, Scriba, B. ii. 145, 1791.

Noctua porphyrea, Scriba. B. ii. 145, 1791. Phalæna-N. aquilina, Bork. E. S. iv. 381, 1792. Noctua duplexina, Haw. (Pr. 18, 1802). Noctua duplex, Haw. L. B. 190, 1810. Noctua valida, Hüb. No. t. 133, f. 606, 1816. Var. a. Hadena satura, Step. H. ii. 181, 1829.

HADENA THALASSINA. The Pale-shouldered Brocade. B. M. Phalæna-N. Thalassina, Hüfn. P—(Berl. M. iii. 298, 1766). Hadena Thalassina, Step. H. ii. 182, 1829. West. & H. M. i. 162, t. 33, f. 3, 1842.

Noctua humeralis, Haw. L. B. 190, 1810. 3. Noctua Achates, Hüb. No. t. 106, f. 498, 1811.

Q. Noctua gemina, Hüb. No. t. 100, 1. 495, 1811.

6. HADENA GENISTE. The Light Brocade.

B. M.

Phalana-N. Genistæ, Bork. E. S. iv. 355, 1792.

Hadena Genistæ, Step. H. ii. 183, 1829. West. & H. M. i. 163, t. 33, f. 5, 6, 1842.

Noctua W-Latinum, var., Esp. S. iv. (426), t. 136, Noct. 57, f. 3, 1788—95.

Phalana dives, Don. B. I. x. 71, t. 352, f. 1, 1801.

Noctua leucophina, Haw. (Pr. 18, 1802).

Noctua rectilinea, Haw. L. B. 189, 1810.

7. HADENA GONTIGUA. The Beautiful Brocade.

B. M.

Noctua contigua, Schiff. (W. V. 82, 1776). Hadena contigua, Step. H. ii. 184, 1829). West. & H. M. i. 163, t. 33, f. 5, 6, 1842. Phalæna-N. Spartii, Bork. E. S. iv. 352, 1792.

Noctua Ariæ, Esp. S. iv. (547), t. 160, Noct. 81, f. 8, 1789-98.

Noctua dives, *Haw. L. B.* 189, 1810. Var. a. Noctua pulchellina, *Haw.* (*Pr.* 18, 1802).

b. Apamea, p., Guén.—Ann. E. S. Fr. vi. 337, 1837. Luperina, p., Bois. (I. M. 2 ed. 115, 1840).

8. Hadena gemina. The Brown Pinioned Brocade. B. M. Hadena gemina, Och. (S. iv. 72, 1816). Treit. S. v. 1, 345, 1825.

Phalana-N. satura, Bork. E. S. iv. 377, 1792. J. Noctua gemina, Hub. No. t. 102, f. 482, 1811. Mamestra? furva, Step. H. ii. 191, 1829.

Var. a. Noctua remissa Hub. No. t. 90, f. 423, 1806.

Hadena remissa, Step. H. ii. 181, 1829. West. & H. M. i. 162, t. 33, f. 2, 1842.

Var. b. Noctua oblonga, Haw. L. B. 188, 1810. Hadena oblonga, Step. H. ii. 182, 1829.

Var. c. Noctua obscura, Haw. L. B. 189, 1810.
Hadena obscura, Step. H. ii, 184, 1829.

Var. d. Noctua anceps, Dup. L. F. vii. 109, t. 107, f. 5, 1827.

Var. e. Noctua submissa, Dahl. (C. & L. 1823).

#### 9. HADENA DENTINA. The Shears.

B M.

Noctua dentina, Schiff. (W. V. 82, 1776). Phalæna-N. plebeia, Linn. Mus. Noctua plebeia, Haw. L. B. 198, 1810.

Hadena plebeia, Step. H. ii. 185, 1829. West. & H. M. i.

164, t. 33, f. 9, 10, 1842.

Var. a. Noctua nana, Esp. S. iv. (486), t. 149, Noct. 70, f. 4, 5, 1789—97.

Var. b. Noctua leucostigma, Haw. L. B. 198, 1810.

Hadena leucostigma, Step. H. ii. 186, 1829. Wood, I. E. t. 12, f. 241, 1834.

Var. c. Hadena longina, Cur. (G. 2 ed. 183, 1837).

Var. d. Hadena Latenai, Pier.—Ann. E. S. Fr. vi. 177, t. 8, f. 3, 1837.

## с. Етнега, р., Нив. V. 218, 1816.

10. HADENA GLAUCA. The Glaucous Shears.

B. M.

Noctua glauca, Hüb. No. t. 87, f. 410, 1806. Hadena glauca, Step. H. ii. 185, 1829. West, & H. M. i. 164, t. 33, f. 7, 8, 1842.

3 ? Hadena ? Lappo, Dalm. ?—Dup. L. F. vii. 255, t. 116, f. 3, 1827.

Var. a. Noctua aperta, Hüb.-G. No. t. 189, f. 800, 1826.

## d. DICHONIA, Hüb. (V. 217, 1816).

## 11. HADENA PROTEA. The Brindled Green.

B. M.

Noctua Protea, Schiff. (W. V. 84, 1776). Hadena Protea, West. & H. M. i. 166, t. 34, f. 3, 4, 1842. Phalæna-N. nebulosa, Bork. E. S. iv, 158, 1792. Noctua virescens, Retz. teste Fab. E. S. iv. 2, 103, 1794. Noctua virensina, Haw. (Pr. 15, 1802). Noctua seladonia, Fab. l. c. Haw. L. B. 199, 1810. Hadena seladonia, Step. H. iii. 133, 1829.

### 140. XYLOCAMPA.

Xylocampa, Guén.—Ann. S. E. Fr. vi. 277, 1837. Dichonia, p., Hüb. V. 217, 1816. Cleophana, p., Treit. Sup. ii. 118, 1835.

XYLOCAMPA LITHORIZA. The Early Gray.
 Phalæna-N. Lithoriza, Bork. E. S. iv. 339, 1792.
 Hadena ? Lithoriza, Step. H. ii. 187, 1829. West. & H. M. i. 165, t. 34, f. 2, 1842.
 Noctua areola, Esp. S. iv. (448) t. 141, Noct. 62, f. 4, 1788

—96

#### 141. NEURIA.

Neuria, Guén.—(Ann. E. S. Fr. x. 241, 1841). Heliophobus, p., Bois, (I. M. 69, 1829). Hadena A., Treit. S. v. 1, 303, 1825.

Noctua operosa, Hüb. No. t. 85, f. 398, 1805.

Neuria Saponariæ. The Bordered Gothic.
 Phalæna-N. Saponariæ, Bork. E. S. iv. 370, 1792.
 Hadena? Saponariæ, Step. H. ii. 184, 1829. West. & H. M. i. 168, t. 34, f. 11, 1842.
 Phalæna-N. reticulata, Vill. ? E. ii. 254, 1789.
 Noctua Calcatrippæ, View. ? T. V. ii. 71, 1790.
 Noctua typica, Hib. No. t. 12, f. 58, 1797.
 Noctua typicoidina, Haw. (Pr. 17, 1802).
 Noctua marginosa, Haw. L. B. 195, 1810.

## 142. HELIOPHOBUS.

Heliophobus, Bois. (I. M. 69, 1829).

a. NEURONIA, p., Hüb. V. 215, 1816.

Heliophobus Popularis. The Feathered Gothic.
 Noctua Popularis, Fab. M. ii. 133, 1787.
 Heliophobus Popularis, Step. H. ii. 189, 1829.

Noctua Graminis, Schiff. (W. V. 82, 1776). Bombyx Lolii, Esp. S. iii. 246, t. 48, f. 1-5, 1784. Phalæna typicoides, Don. B. I. xv. 1, t. 505, 1811.

2. HELIOPHOBUS HISPIDUS.* The Beautiful Gothic. B. M. Noctua hispida, Hüb. No. t. 166, f. 784-5, \$, 786, Q, 1828. Noctua hirta, Dup. L. F. vi. 275, t. 90, f. 3, 1826. Heliophobus pilosus, Bois. I. M. 70, 1829.

b. LUPERINA, p., Bois. (I. M. 77, 1829).

3. HELIOPHOBUS? DUMERILII.* The Pale Feathered Rustic. Noctua Dumerilii, Dup. L. F. vi. 277, t. 90, f. 4, 1826. Luperina Dumerili, Dup .- Bois. I. M. 77, 1829.

#### 143. PACHETRA.

Pachetra, Guén.—(Ann. E. S. Fr. x. 241, 1841). Mamestra, p., Hüb. V. 214, 1816. Heliophobus, p., Bois. (I. M. 69, 1829). Luperina +. Bois. I. M. 2 ed. 113, 1840.

1. PACHETRA LEUCOPHEA. The Feathered Ear. B. M. Noctua leucophæa, Schiff. (W. V. 82, 1776). Heliophobus leucophæus, Step. H. ii. 190, t. 24, f. 1, ♀, 1829. Noctua fulminea, Fab. G. 282, 1777.

 Bombyx vestigialis, Esp. S. iii. 270, t. 53, f. 4, 1784.
 Noctua ravida, Esp. S. iv. (462), t. 145, Noct. 65, f. 1, 1789 -- 96.

### 144. DIANTHECIA.

Dianthecia, Bois. I. M. 2 ed. 124, 1840.

a. HADENA, p., Hub, V. 216, 1816.

1. DIANTHECIA CUCUBALI. The Campion.

B. M.

Noctua Cucubali, Schiff. (W. V. 84, 1776). Hadena? Cucubali, Step. H. ii. 187, 1829. Cur. B. E. vii. t. 308, 1830. Noctua rivularis, Fab. S. E. 613, 1775.

Noctua triangularis, Thunb. I. S. 3, 1784.

2. DIANTHECIA CAPSINCOLA. The Lychnis.

B. M.

Noctua Capsincola, Schiff, (W. V. 84, 1776).

Hadena? Capsincola, Step. H. ii. 188, 1829. West. & H. M. i. 167, t. 34, f. 7—10, 1842.

Phalæna-N. bicruris, Hüfn. — (Berl. M. iii. 302, 1769).

Noctua rivularis, var., Fab. E. S. iii. 2, 101, 1794.

b. NEURONIA, p., Ilüb. V. 216, 1816.

3. DIANTHECIA PERPLEXA. The Tawny Shears.

B. M.

B. M.

Noctua perplexa, Schiff, (W. V. 312, 1776).
Phalæna-N. carpophaga, Bork, E. S. iv. 422, 1792.
Noctua concinna, var. lepida, Esp. S. iv. (500), t. 152, f. 2, 1789—97.

Var. a. Noctua ochracea, Haw. L. B. 199, 1810.
 Hadena? ochracea, Step. H. ii. 186, 1829. West. & H. M. i. 165, t. 34, f. 1, 1844.

### c. HARMODIA, Hüb. V. 207, 1816.

4. DIANTHEGIA ALBIMACULA.* The Beautiful Coronet. B. M.

Phalæna-N. albimacula, Bork, E. S. iv. 149, 1792. Miselia? albimacula, Step. H. iii. 26, 1829. West. & H. M. i. 187, t. 39, f. 16, 1843.

Noctua compta, Esp. S. iv. (274), t. 117, A. Noct. 38a, f. 7, 1787—91.

Noctua concinna, Hüb. No. t. 11, f. 51, 1798? Noctua conserta, Hüb. (V. 207, 1816).

5. DIANTHECIA CONSPERSA. The Marbled Coronet.

Noctua conspersa, Schiff. (W. V. 71, 1776). Noctua annulata, Fab. G. 281, 1777. Noctua nana, Rottenberg.—Naturf. ix. 132, 1778. Noctua variegata, Haw. (Pr. 17, 1802).

Noctua compta, Haw. L. B. 179, 1810. Miselia? compta, Step. H. iii. 26, 1829. West. & H. M. i. 187, t. 39, f. 15, 1843.

Var. a. Noctua X-scriptum, Sow. B. M. i. 117, t. 55, 1803.

## 145. EREMOBIA.

Eremobia, Step. H. iii. 94, 1829, 9. Atypha, p., Hüb. V. 214, 1816. Ilarus, p., Bois. (I. M. 76, 1829). Ilarus, Bois. I. M. 2 ed. 125, 1840.

1. EREMOBIA OCHROLEUCA. The Dusky Sallow.

B. M.

Noctua ochroleuca, Schiff. (W. V. 87, 1776). Eremobia ochroleuca, Step. H. iii. 95, 1829. West. & H. M. i. 228, t. 50, f. 5, 1843.

Noctua flamma, Fab. M. ii. 164, 1787.

Phalæna citrina, Don. B. I. x. 36, t. 340, f. 2, 1801. Var. a. Phytometra bifasciosa, Haw. L. B. 266, 1810.

### 146. POLIA.

Polia, Och. (S. iv. 73, 1816). Treit. S. v. 2, 5, 1825. Poliæ, Hüb. V. 210, 1816.

a. Antitype, Hüb. V. 216, 1816.

1. Polia Chi. The July Chi.

B. M.

Phalæna-N. Chi, *Linn. S. Nat*, i. 514, 1758. Polia Chi, *Step. H.* iii. 34, 1829. *West. & H. M.* i. 192, t. 40, f. 15, 1842. Var. a. Polia olivacea, *Step. H.* iii. 325, 1830.

b. ÆTHRIA, p., Hüb. V. 218, 1816.

2. POLIA SERENA. The Broad-barred White.

B. M.

Noctua serena, Schiff. (W. V. 84, 1776).
Polia serena, Step. H. iii. 33, 1829. West. & H. M. i. 192, t. 40, f. 13, 14, 1842.
Phalæna-N. bicolorata, Hüfn.—(Berl. M. iii. 410, 1769).
Noctua bicolor, View. T. V. ii. 69, 1790.

c. Xanthopastis, Hüb. V. 211, 1816.

Phalæna par, Don. B. I. x. 32, t. 338, f. 3, 1801.

3. Polia Dysodea. The Ranunculus.

B. M.

Noctua dysodea, Schiff. (W. V. 72, 1776). Polia dysodea, Step. H. iii. 32, 1829. West. & H. M. i. 191, t. 40, f. 11, 12, 1842. Phalæna-N. ornata, Vill. E. ii. 280, 1789.

Noctua flavicincta minor, Esp. S. iv. (513), t. 153, Noct. 74, f. 6, 7, 1789-97.

Noctua Spinaciæ, View. T. V. ii. 70, 1790. Phalæna-N. chrysozona, Bork. E. S. iv. 264, 1792. Noctua Ranunculina, Haw. (Pr. 17, 1802).

4. Polia Flavicincia. The Large Ranunculus.

B. M.

Noctua flavicincta, Schiff. (W. V. 72, 1776).
Polia flavicincta, Step. H. iii. 32, 1829. West. & H. M. i. 191, 1. 40, f. 9, 10, 1842.
Noctua undulata, Goëze, E. B. iii. 204, 1783.

Phalæna-N. discolor, Vill. E. ii. 280, 1789.

Noctua flavicineta major, Esp. S. iv. (507), t. 153, Noct. 74, f. 1-3, 1789-97.

Phalana-N. dysodea, Bork. E. S. iv. 262, 1792.

### 147. EUMICHTIS.

Eumichtis, Hüb. V. 211, 1816. Epunda, Dup. C. 141, 1846.

 Eumichtis Lichenea. The Feathered Ranunculus. B. M. Polia Lichenea, Hüb. No. t. 122, f. 562, ♂, f. 563, ♀, 1814.

### 148. EUROIS.

Eurois, Hüb. V. 218, 1816. Polia B., Och. (S. iv. 74, 1816). Aplecta, Guén.—Ann. E. S. Fr. vii. 217, 1838.

Eurois advena. The Pale Shining Brown.
 Noctua advena, Schiff. (W. V. 77, 1776).
 Polia advena, Step. H. iii. 28, 1829. West. & H. M. i. 189, t. 40, f. 1, 1842.

Noctua celatina, Haw. (Pr. 17, 1802). Var. a. Noctua nitens, Haw. L. B. 188, 1810. Noctua nitensina, Haw. (Pr. 17, 1802). Polia nitens, Step. H. iii. 28, 4829.

2. Eurois tinota. The Silvery Arches. B. M.

Noctua tincta, Brahm, I. K. ii. 393, 1791. Polia tincta, Step. H. iii. 29, 1829. West. & H. M. i. 189, t. 40, f. 6, 1842.

Noctua occulta, Fab. M. ii. 166, 1787.

Noctua trimaculosa, Esp. S. iv. 400, t. 131, Noct. 52, f. 5. 1788-95.

Noctua advena, View. T. V. ii. 55, 1790.

Noctua hepatica, Hüb. No. t. 16, f. 77, 1798. Noctua argentina, Haw. L. B. 186, 1810.

3. EUROIS OCCULTA. The Great Brocade.

B. M.

Phalæna-N. occulta, Linn. S. Nat. i. 514, 1758. Step. H. iii. Polia occulta, Cur. ? B. E. vi. t. 248, 1829, 2. 29, 1829, 7.

4. EUROIS NEBULOSA. The Gray Arches.

B. M.

Phalæna-N. nebulosa, Hufn.—(Berl. M. iii. 418, 1769). Polia nebulosa, West. & H. M. i. 189, t. 40, f. 2, 3, 1843.

Noctua polyodon, Fab. S. E. 616, 1775.

Noctua transversa, Gesen. H. 170, 1786.

Noctua bimaculosa, Esp. S. iv. (403), t. 132, Noct. 53, f. 1, 2, 1788—95.

Polia bimaculosa, Step. H. iii. 28, 1829.

Phalæna Noctua Thapsi, Brahm, I. K. ii. 135, 1791.

Noctua plebeia, Hüb. No. t. 16, f. 78, 1798.

Phalæna grandis, Don. B. I. x. 51, t. 345, f. 1, 1801.

5. EUROIS HERBIDA. The Green Arches.

B. M.

Noctua Herbida, Schiff. (W. V. 313, 1776).

Polia Herbida, Step. H. iii. 30, 1829. West. & H. M. i. 190, t. 40, f. 7, 8, 1843.

Noctua egregia, Esp. S. iv. (297), t. 149, Noct. 40, f. 7, 1789

Phalæna-N. Jaspidea, Bork. E. S. iv. 440, 1792.

Noctua prasina, Fab. E. S. iii. 2, 1794.

Noctua Ligustrina, Haw. (Pr. 15, 1802).

Noctua mixtina, Haw. (Pr. 17, 1802).

Noctua mixta, Haw. L. B. 187, 1810.

## 149. TRACHEA.

Trachea, Hüb. V. 219, 1816.

1. TRACHEA ATRIPLICIS. The Wild Arrach.

B. M.

Phalæna-N. Atriplicis, Linn. S. Nat. i. 517, 1758. Trachea Atriplicis, Step. H. iii. 22, 1829. Cur. B. E. ix. t. 431, 1832.

#### 150. HAPALIA.

Hapalia, Hüb. V. 220, 1816. Actebia, Step. (Cat. ii. 78, 1829). Id. H. iii. 20, 1829. Spælotis, †††, Bois. (I. M. 2 ed. 107, 1840).

1. HAPALIA PRECOX. The Portland Moth.

B. M.

Phalmua-N. præcox, Linn. S. Nat. i. 517, 1758. Actebia præcox, Step. H. iii. 21, 1829. Cur. B. B. xii. t. 539, 1835. Noctua præceps, Schiff. (W. V. 82, 1776).

### 151. AGRIOPIS.

Agriopis, Bois. I. M. 2 ed. 123, 1840. Pœcilia, p., Hüb. V. 204, 1816. Chariptera, p., Guén.—(Ann. E. S. Fr. x. 243, 1841).

1. AGRIOPIS APRILINA. The Marvel-du-Jour.

B. M.

Phalæna-N. Aprilina, Linn. S. Nat. i, 514, 1758. Miselia Aprilina, Step. H. iii. 25, 1829. West. & H. M. i, 187, t. 39, f. 13, 14, 1843. Noctua runica, Schiff. (W. V. 70, 1776).

#### 152. VALERIA.

Valeria, Germar.—Step. H. iii. 22, 1829. Meganephria, p., Hüb. V. 206, 1816. Miselia,† Bois. I. M. 2 ed. 124, 1840.

VALERIA OLEAGINA. The Green Brindled Dot.
 Noctua oleagina, Schiff. (W. V. 59, 1776). Sow. B. M. i. 77, t. 37, 1805.
 Valeria oleagina, Step. H. iii. 23, 1829.

### 153. MISELIA.

Miselia, Treit. S. v. 1, 386, 1825. Meganephria, p., Hüb. V. 206, 1816.

1. MISELIA OXYACANTHÆ. The Ealing's Glory.

Phalæna-N. Oxyacanthæ, Linn. S. Nat. i. 516, 1758.

Phalæna Oxyacanthæ, Don. B. I. v. 73, t. 165, 1796.

Miselia Oxyacantha, Step. H. iii. 24, 1829.

*2. MISELIA BIMACULOSA.* The Double-spot Brocade. B. M.

Phalæna-N. bimaculosa, Linn. S. Nat. ii. 856, 1767.

Miselia bimaculosa, Cur. B. E. iv. t. 177, 1827. Step. H. iii. 24, 1829.

Noctua bimaculosa Italica, *Esp. S.* iv. t. 157, *Noct.* 78, f. 5, 1789.

Noctua binubeculosa, Esp. S. iv. 528, 1798.

#### 154. THYATIRA.

Thyatira, Och.—Hüb. V. 236, 1816. Strophia, Meig. E. S. iii. 174, 1832.

- a. Calleida, Sodoff.-Bull. S. I. Mosc. 14, 1837.
- 1. THYATIRA BATIS. The Peach-blossom.

Phalæna-N. batis, Linn. S. Nat. i. 509, 1758. Thyatira batis, Cur. B. E. ii. t. 72, 1825. Step. H. iii. 48, 1829.

- b. HABROSYNE, Hüb. V. 236, 1816.
- 2. THYATIRA DERASA. The Buff Arches.

B. M.

B. M.

Phalæna-N. derasa, Linn. S. Nat. ii. 851, 1767. Thyatira derasa, Step. H. iii. 47, 1829. West. & H. M. i. 201, t. 41, f. 13, t. 42, f. 114, 1843.

### Sub-F. VII. BOMBYCOIDI.

Bombycoidi, *Bois.* (I. M. 60, 1829). Apatelæ, Hüb. V. 199, 1816.

#### 155. DIPHTERA.

Diphtera, Och. (S. iv. 63, 1816, 3). Moma, Hüb. V. 203, 1816, 9. Diphthera, Treit. S. v. 1, 47, 1825.

## a. Moma, Hüb. ut supra.

DIPHTERA OBION. The Scarce Marvel-du-Jour. B. M.
 Noctua Orion, Esp. S. iv. (283), t. 148, Noct. 39, f. 4-7, 1791-89.

Diphtera Orion, Sup. H. iii. 46, 1829. Cur. B. E. ix. t. 404, 1832.

Noctua ludificiana, Haw. (Pr. 15, 1802).

Var.? a. Noctua Aprilina, Schiff. (W. V. 70, 1776).
 Phalæna-N. runica, Gmel. S. Nat. i. 5, 2561, 1788.
 Diphtera runica, Step. H. iii. 46, 1829

#### 156. TRIÆNA.

Triæna, Hüb. V. 200, 1816. Acronycta, p., Step. H. iii. 39, 1829. Semaphora, Guén.—(Ann. E. S. Fr. x. 235, 1841).

1. TRIENA PSI. The Gray Dagger.

B. M

Phalæna-N. Psi, Linn. S. Nat. i. 524, 1758. Acronycta Psi, Step. H. iii. 39, 1829. West. & H. M. i. 198, t. 42, f. 5; t. 41, f. 116, 1842. Noctua tridens, Hüb. No. t. 1, f. 4, 1797.

2. TRIENA TRIDENS. The Dark Dagger.

Var. a. Acronycta cuspis, Step. H. iii. 40, 1829.

B. M.

Noctua tridens, Schiff. (W. V. 67, 1776). Aeronycta tridens, Step. H. iii. 40, 1829. West. & H. M. i. 198, t. 42, f. 7; t. 42, f. 18, 1842. Noctua Psi, Hüb. No. t. 1, f. 5, 1797.

### 157. ACRONYCTA.

Acronycta, Och. (S. iv. 62, 1816). Treit. S. v. 1, 3, 1825. Cometa, Sodoff.—Bull. S. I. Mosc. 12, 1837.

a. Polymixis, p., Hüb. V. 205, 1816.

1. ACRONYCTA LIGUSTRI. The Coronet.

B. M.

Noctua Ligustri, Schiff. (W. V. 70, 1776). Acronycta Ligustri, Step. H. iii. 38, 1829. West. & H. M. i. 194, t. 42, f. 1; t. 41, f. 112, 1842. Noctua Coronina, Haw. (Pr. 17, 1802).

Var. a. Noctua Coronulma, Haw. (Pr. 17, 1802). Noctua Coronula, Haw. L. B. 179, 1810. b. JOCHEERA, Hüb. V. 201, 1816.

2. ACRONYCTA ALNI. The Alder.

B. M.

Phalæna-N. Alni, Linn. S. Nat. ii. 845, 1767. Acronycta Alni, Step. H. iii. 38, 1829. West. & H. M. i. 195, t. 42, f. 3; t. 41, f. 114, 1842. Noctua degener, Schiff. (W. V. 70, 1776).

с. Нувома, Нив. V. 200, 1816.

3. ACRONYCTA STRIGOSA.* The Marsh Dagger.

B. M.

Noctua strigosa, Schiff. (W. V. 88, 1776). Acronycta strigosa, Step. H. iii. 30, 1829. Wood, I. E. 1. 52, f. 1667. Noctua favillacea, Esp. S. iv. (382), t. 127, f. 4, 1788—95. Phalæna-N. favillacea, Bork. E. S. iv. 217, 1792.

d. Pharetra, Hüb. V. 202, 1816.

4. ACRONYCTA AURICOMA. The Scarce Dagger.

B. M.

Noctua auricoma, Schiff. (W. V. 67, 1776).

Aeronycta auricoma, Step. H. iii. 41, 1829. West. & H. M. i. 196, t. 42, f. 9; t. 41, f. 101, 1842.

Phalæna lunulata, Müll. Z. D. Pr. 104, 1786. Var. a. Noctua Pepli, Hüb. No. t. 134, f. 614, 1816. Var. b. Noctua similis, Haw. L. B. 180, 1810. Aeronycta similis, Step. H. iii. 41, 1829. Var. c. Noctua Menyanthedis, Haw. L. B. 180, 1810.

5. Acronycta Menyanthidis. The Light Knot-Grass. B. M. Noctua Menyanthidis, View. T. V. ii. 50, 1790. Esp. S. iv. (461), t. 144, Noct. 65, f. 5, 1788—96.
Acronycta Menyanthidis, Step. H. iii. 43, t. 27, f. 1, 1829.
Acronycta Menyanthedis, West. & H. M. i. 196, t. 42, f. 11,

е. Австомуястя, р., Нйв. V. 202, 1816.

6. ACRONYCTA RUMICIS. The Knot-Grass.

1842.

B. M.

Phalæna-N. Rumicis, Linn. S. Nat. i. 516, 1758. Aeronycta Rumicis, Step. H. iii. 43, 1829. West. & H. M. i. 197, t. 42, f. 15; t. 41, f. 121, 1842.

Var. a. Noctua Euphorbiæ, Haw. L. B. 178, 1810.

Acronycta Euphorbiæ, Step. H. iii, 43, 1829. Wood, I. E. t. 14, f. 320.

Var. b. Acronycta Euphrusiæ, Step. H. iii. 43, 1829.

7. ACRONYCTA SALICIS. The Willow.

Acronycta Salicis, Cur. B. E. iii, t. 136, 1826. Acronycta Euphorbia, Wood, I. E. t. 14, f. 320. (Var. præc.)?

8. ACRONYCTA MYBICE.

B. M.

Acronycta Euphorbiæ, Steph. (nec. Schiff.) Acronycta Myrioæ, Guén. Spec. Gen. v. 59.

9. ACRONYCTA MEGACEPHALA. The Poplar Gray.

B. M.

Noetua megacephala, Schiff. (W. V. 67, 1776).

Aeronycta megacephala, Step. II. iii. 37, 1829. West. & H.

M. i. 195, t. 42, f. 16; t. 41, f. 142, 1842.

Noctua Rumicis, Esp. S. iv. t. 117, Noet. 38, f. 7, 9, 1788.

Phalæna-N. macrocephala, Vill. E. 175, 1789. Noctua areaina, Haw. (Pr. 17, 1802).

## 158. APATELA.

Apatela, Step. H. iii. 34, 1829.

а. Австомувств, р., Нив. V. 202, 1816.

1. APATELA ACERIS. The Sycamore.

B. M.

Phalæna-N. Aceris, *Linn. S. Nat.* i. 514, 1758. Apatela Aceris, *Step. H.* iii. 36, 1829. West. & H. M. i. 194, t. 41, f. 5, 6; t. 42, f. 17, 1842.

Var. a. Noctua candelisequa, Esp. S. iv., Sup. 39, t. 191, Noct. 112, f. 1, 1793?

Noctua infuscata, Haw. L. B. 177, 1810.

Apatela Aceris, West. & U. M. l. c. t. 41, f. 6,

Acronycta Aceris,* Wing.—Tr. Ent. Soc. v. 120, t. 14, f. 7, 1849, herm.

b. ACRONYCTA, Hüb, V. 20, 1816.

2. APATELA LEPORINA. The Miller.

B. M

Phalaua-N. Leporina, Linn. S. Nat. i. 510, 1758. Apatela Leporina, Step. H. iii. 35, 1829. West. & H. M. i. 193, t. 41, f. 1; t. 42, f. 13, 1842. Noctua Bradyporina, Hüb. No. t. 124, f. 570, 571, 1814. Var. a. Acronycta Bradyporina, Treit. S. v. i. 9, 1825. Step. H. iii. 36, 1829. West. & H. M. i. 193, t. 41, f. 4; t. 42, f. 12, 1842.

Noctua Leporina, Hüb. No. t. 4, f. 16, 1797.

#### Sub-F. VIII. BRYOPHAGIDI.

Bryophagidi, Guén.—Ann. E. S. Fr. vi. 322, 1837.

#### 159: BRYOPHILA.

Bryophila, Treit. S. v. 1, 57, 1825.

a. PŒCILIA, p., Hüb. V. 204, 1816.

BRYOPHILA GLANDIFERA. The Marbled Green.
 Noctua glandifera, Schiff. (W. V. 70, 1776).
 Bryophila glandifera, Step. H. iii. 44, 1829.
 i. 199, t. 41, f. 8, t. 42, f. 19, 1842.
 Noctua Lichenis, Fab. S. E. 614, 1775.

Noctua Lichenes, Fab. M. ii. 173, 1787. Var. a. Noctua Par, Hüb. No. t. 110, f. 515, 1812.

b. Метасивовтів, Hüb. V. 204, 1816.

2. BRYOPHILA PERLA. The Marbled Beauty.

B. M.

Noctua Perla, Schiff. (W. V. 70, 1776). Bryophila Perla, Step. H. iii. 45, 1829. West. & H. M. i. 199, t. 41, f. 10, 1843. Phalæna-N. glandifera, Bork. E. S. iv. 128, 1792.

Noctua Litophila, Scrib. B. iii. 262, 1793.

## Sub-F. IX. NOCTUO-BOMBYCIDI.

Noctuo-Bombycidi, Guén.—(Ann. E. S. Fr. x. 236, 1841). Noctuo-Bombycini, Bois. (I. M. 58, 1829).

#### 160. CERATOPACHA.

Ceratopacha, Step. H. iii. 331, 1831. Ceropacha, Step. (Cat. ii. 95, 1829). Id. H. iii. 51, 1829. Cymatophora, B., b., Treit. S. v. 1, 77, 1825. Cleoceris Viminalis, West. § H. M. i. 206, t. 44, f. 5, 1843. Phalena-N. Saliceti, Bork. E. S. iv. 632, 1792. Bombyx stricta, Esp. S. iii. Sup. 30, t. 84, Bomb. 5, f. 5, 1794. Noctua scripta, Hüb. No. t. 10, f. 50, 1797.

### 162. EUGRAMMA.

Eugramma, Step. MSS.
Ochria, p., Hūb. V. 233, 1816.
Tethea, B., a., p., Treit. S. v. 1, 84, 1825.
Cymatophora, Step. H. iii. 58, 1829.
Chymatophora, p., Guén.—Aan. E. S. Fr. vi. 315, 1837.
Cleoceris, p., Bois, I. M. 2 ed. 93, 1840.
Tethea, Dup. C. 102, 1846.

I. EUGRAMMA Oo. The Heart Moth.

B. M.

Phalæna-B. Oo, Linn. S. Nat. i. 507, 1758. Cymatophora Oo, Step. H. iii. 59, 1829. Cleoceris Oo, West. & H. M. i. 206, t. 44, f. 6, 7, 1843. Noctua ferruginago, Hüb. No. t. 41, f. 195, 1799.

Var. a. Noctua renata, Fab. P. E. S. iii. b, 85, 1794.
Noctua renago, Haw. L. B. 238, 1810.
Cymatophora Oo, Wood, I. E. t. 14, f. 339, 1836.

# Sub-F. X. XANTHIDI.

Xanthidi, Step. MSS.

### 163. IPIMORPHA.

Ipimorpha, Hüb. V. 238, 1816. Cymatophora, A., Třeit. S. v. 1, 77, 1825. Tethea, Step. H. iii. 55, 1829. Kymatophora, Sodoff.—Bull. S. I. Mosc. 13, 1837. Plastenis, Bois. I. M. 2 ed. 93, 1840.

1. IPIMORPHA SUBTUSA. The Olive.

B. M.

Noctua subtusa, Schiff. (W. V. 88, 1776). Tethea subtusa, Step. H. iii. 56, 1829. Plastenis subtusa, West. & H. M. i. 205, t. 44, f. 1, 4, 1843. Noctua tenuina, Haw. (Pr. 14, 1802).

2. IPIMORPHA RETUSA. The Double Kidney. B. M. Phalæna-N. retusa, Linn. F. ii. No. 1218, 1761.

Tethea retusa, Step. H. iii. 56, 1829.

Plastenis retusa, West. & H. M. i. 205, t. 44, f. 2, 3, 1843.

Noctua vetula, Hüb. Beit. 1, 13, t. 11, f. H., 1786.

Phalæna chrysoglossa, Beck.—Linn. Tr. ii. 5, t. 1, f. 10, 11, 1794.

Noctua Caprææ, Fab. ? E. S. iii. b, 26, 1794.

Var. a. Noctua gracilis, Haw. L. B. 251, 1810.

Tethea gracilis, Step. H. iii. 57, 1829. Wood, I. E. t. 14, f. 337, 1836.

Noctua gracilina, Haw. (Pr. 14, 1802).

#### 164. COSMIA.

Cosmia, Och. (S. iv. 84, 1816, 3). Treit. S. v. 2, 379, 1825.

a. Eustegnia, Hüb. V. 236, 1816, 9.

- COSMIA PYRALINA. The Lunar-spotted Pinion.
   Noctua Pyralina, Schiff. (W. V. 88, 1776).
   Cosmia Pyralina, Step. H. iii. 61, 1829. West. & H. M. i. 207, t. 44, f. 8, 9, 1843.
   Phalæna-N. corusca, Bork. E. S. iv. 640, 1792.
- COSMIA DIFFINIS. The White-spotted Pinion.
   Phalæna-N. diffinis, Linn. S. Nat. ii. 848, 1767.
   Cosmia diffinis, Step. H. iii. 60, 1829. West. & H. M. i. 207, t. 44, f. 10, 11, 1843.
   Noctua affinis, Hüb. Beit. i. 10, t. 1, f. E., 1786.
   Phalæna-N. nacarata, Vill. E. ii. 264, 1789.

## b. Calymnia, Hüb. V. 235, 1816.

COSMIA AFFINIS. The Lesser-spotted Pinion.
 Phalæna-N. affinis, *Linn. S. Nat.* ii. 848, 1767.
 Cosmia affinis, *Step. H.* iii. 61, 1829. West. & H. M. i. 207, t. 44, f. 12, 1843.
 Noctua palliata, *Fab. E. S.* iii. 2, 38, 1794.

#### 165. EUPERIA.

Euperia, Guén.—Ann. E. S. Fr. viii. 486, 1839.

## a. CALYMNIA, p., Hüb. V. 235, 1816.

## I. EUPERIA TRAPETZINA. The Dun-bar.

B. M.

Phalama-N. trapetzina, Linn. S. Nat. i. 510, 1758. Cosmia trapetzina, Step. H. iii. 62, 1829. Wood, I. E. t. 15,

Cosmia trapetzina, Step. H. iii. 62, 1829. Wood, I. E. t. 15, f. 343, f., 1838. West. f. H. M. 207, t. 44, f. 13, Q., 1843. Phalæna-N. rhombica, Hüfn.—(Berl. M. iii. 296, 1769).

### b. Enargia, Hüb. V. 235, 1816.

### 2. EUPERIA FULVAGO. The Angle-striped Sallow.

B. M.

Noctua fulvago, Schiff. (W. V. 86, 1776).

Cosmia fulvago, Step. H. iii. 62, 1829. West. & H. M. i. 208, t. 44, f. 14, \$, 1843.

Noctua paleacea, Esp. S. iv. (323), t. 122, Noct. 43, f. 3, 4, 1788—92.

Phalmna-N. gilvago, Bork. E. S. iv. 683, 1792.

Noctua ungulago, Hatchett.—Ent. Tr. i. 274, t. 5, fig. sup. 9, 1812.

### 166. XANTHIA.

Xanthia, Och. (S. iv. 82, 1816). Treit. S. v. 2, 341, 1825.

## a. CITRIA, Hüb. V. 234, 1816.

# 1. XANTHIA CERAGO. The Sallow.

B. M.

Noctua cerago, Schiff. (W. V. 87, 1776). Phalæna-N. fulvago, Linn, P. F. ii. No. 1173, 1761.

Xanthia fulvago, Step. H. iii. 64, 1829, West. & H. M. i. 209, 1. 45, f. 3, 4, 1843.

Phalana-N. crocea, Vill. E. ii. 279, 1789.

Var. a. Noctua icteritia, Goëze. B. iii. 188, 1783.
Noctua flavescens, Esp. S. iv. (322), t. 122, Noct. 43, f. 2, 1788—92.

Var. b. Noctua gilvago, Scrib. B. ii. 141, t. x. f. 1, 1791.

Var. c. Noctua gilvago, Haw. L. B. 237, 1810.

Xanthia gilvago, Step. H. iii. 65, 1829. Wood, I. E. t. 15, f. 347, 1836.

2. Xanthia flavago. The Pink-barred Sallow. B. M. Noctua flavago, Fab. M. ii. 160, 1787.

Xanthia flavago, Step. H. iii. 64, 1829. West. & H. M. i. 209, t. 45, f. 1, 2, 1843.

Noctua togata, Esp. S. iv. (336), t. 124, Noct. 45, f. 1, 1788—92.

Phalæna-N. ochreago, Bork. E. S. iv. 671, 1792. Noctua silago, Hüb. No. t. 40, f. 191, 1799.

Phalæna rubago, Don. B. I. x. 32, t. 338, f. 2, 1801.

### b. MELLINIA, Hüb. V. 235, 1816.

3. Xanthia gilvago. The Dusky-lemon Sallow.

B. M.

Noctua gilvago, Schiff. (W. V. 87, 1776). Phalæna-N. ocellaris, Bork. E. S. iv. 647, 1792. Var. a. Noctua palleago, Hüb. No. t. 40, f. 192, 1799.

### c. Ochria, Hüb. V. 233, 1816.

4. XANTHIA AURAGO. The Barred Sallow.

B. M.

Noctua aurago, Schiff: (W. V. 86, 1776). Xanthia aurago, Step. H. iii. 65, 1829. West. & H. M. i. 210, t. 45, f. 5, 1843.

Noctua prætexta, Esp. S. iv. (338), t. 124, Noct. 45, f. 2, 1788-92.

Var. a. Phalæna-N. rutilago, Bork. E. S. iv. 675, 1792.

Var. b. Noctua fucata, Esp. S. iv. (341), t. 124, Noct. 45, f. 3, 4.

### d. CIRRHIA, Hüb. V. 234, 1816.

5. XANTHIA CITRAGO. The Orange Sallow.

B. M.

Phalæna-N. citrago, *Linn. S. Nat.* i. 518, 1758. Xanthia citrago, *Step. H.* iii. 66, 1829. *West. & H. M.* i. 210, t. 45, f. 7, 8, 1843.

Noctua ochreago, Hüb. Beit. ii. 1, 10, t. 1, f. D., 1789. Noctua aurago, Lang. V. ii. 145, 1789.

### 167. JODIA.

Jodia, Hüb. V. 234, 1816. Xantholeuca, Step. H. iii. (36, 1829). Id. 329, 1831. Lampetia, Cur. (G. 153, 1830). Hoporina, Bois. I. M. 2 ed. 147, 1840. I. Jodia CROCEAGO. The Orange Upperwing.

B. M.

Noctua croceago, Schiff. (W. V. 86, 1776).

Xantholeuca croceago, Step. H. iii. 67, 1829. West. & H. M. i. 211, t. 45, f. 9, 10, 1843.

Noctua fulvago, Esp. S. iv. (678), t. 186, f. 3, 1790-1801? Phalæna aurantiago, Don. B. I. v. 15, t. 150, f. 2, 3, 1796. Phalæna-N. ferruginata, Turt.-Gmel. iii. 254, 1806.

#### 168. ORBONA.

Orbona, Hüb. V. 232, 1816.

a. Orbona, Hub. ut supra.

I. ORBONA RUFINA. The Flounced Rustic.

B. M.

Phalæna-N. rufina, Linn. S. Nat. i. 822, 1758.

Xanthia? rufina, Step. H. iii. 65, 1829.

Orbona rufina, West. & H. M. i. 211, t. 45, f. 11, 12, 1843. Phalana-N. helvola, Linn. S. Nat. i. 507, 1758.

Noctua catanata, Esp. S. iv. (327), t. 123, Noct. 44, f. 1, 2, 1788-92.

Noctua ferrugina, Haw. (Pr. 15, 1802).

Var. a. Phalæna N. punica, Bork. E. S. iv. 687, 1792.

b. Sideridis, p., Hub. No. t. 232, 1816.

2. ORBONA FERRUGINEA. The Brick.

B. M.

Noctua ferruginea, Schiff. (W. V. 86, 1776).

Nanthia? ferruginen, Step. H. iii. 68, 1829.

Orbona ferruginea, West. & H. M. i. 212, t. 45, f. 13, 1843.

Phalana-N. circellaris, Hub .- (Berl. M. iii. 404, 1769).

Noctua undata, View. T. V. ii. 17, 1790.

Noctua fuscago, Esp. S. iv. (677), t. 176, Noct. 97, f. 5, 6, 1790, 1801?

Phalæna-N. undosa, Bork. E. S. iv. 753, 1792.

Noctua unimaculina, Haw. (Pr. 15, 1802).

Noctua macilenta, Haw. L. B. 239, 1810. Orthosia? macilenta, Step. II. ii. 148, 1829.

Aber.? Noctua macilenta, Hub. No. t. 149, f. 688, 1816.

### 169. ATETHMIA.

Atethmia, Hub. V. 238, 1816. Cirrædia, Guén .- Ann. E. S. Fr. viii. 489, 1839. 1. Atethmia centrago. The Centre-barred Sallow.

B. M.

Noctua centrago, Haw. L. B. 236, 1810. Xanthia centrago, Cur. B. E. ii. t. 84, 1825. Xanthia? centrago, Step. H. iii. 65, 1829. Noctua xerampelina, Hub. No. t. 90, f. 421, 1806.

#### 170. SCOLIOPTERYX.

Scoliopteryx, Germ. Pr. 14, 1811. Ephemias, Hüb. V. 248, 1816. Calyptra, Och. (S. iv. 78, 1816). Calpe, Treit. S. v. 2, 168, 1825. Gonoptera, Latr. (F. N. 476, 1825).

1. Scolioptebyx Libatrix. The Herald.

B. M.

Phalæna-B. Libatrix, *Linn. S. Nat.* i. 507, 1758. Phalæna Libatrix, *Don. B. I.* vi. 85, t. 216, 1797. Calyptra Libatrix, *Step. H.* iii. 50, 1829. Scoliopteryx Libatrix, *Step. H.* iii. 325, 1831. Noctua modusta, *Müll. F. F.* 42, 1774.

Sub-F. XI. GORTYNIDI.

Gortynidi, Dup. C. 114, 1846.

171. GORTYNA.

Gortyna, Och. (S. iv. 82, 1816).

a. Ochria, p., Hüb. V. 233, 1816.

1. GORTYNA FLAVAGO. The Frosted Orange.

B. M.

Noctua flavago, Schiff. (W. V. 86, 1776).
Gortyna flavago, Step. H. iii. 70, 1829. West. & H. M. i. 213, t. 47, f. 16, 17, 1843.
Noctua optilaga, Fib. Beit. 1, 19, t. 2, f. M, 1786.

Noctua rutilago, Fab. M. ii. 160, 1787. Phalæna Lappæ, Don. B. I. x. 35, t. 340, 1801.

b. GORTYNA, Hüb. V. 232, 1816. Hydræcia, p., Guén.—(Ann. E. S. Fr. x. 237, 1841). 2. GORTYNA MICACEA. The Rosy Rustic. B. M.

Noctua micacea, Esp. S. iv. (466), t. 145, Noct. 66, f. 6, 1789

Gortyna micacea, Cur. B. E. vi. t. 252, 1829, 3. Step. H. iii. 69, 1829, 8.

Noctua Cypriaca, Hub. No. t. 46, f. 224, 1799.

3. GORTYNA PETASITIS. The Butter-bur.

B. M.

Gortyna Petasitis, Doub .- Zool, v. 1914, 1847. Noctua Vindelicea, Frey. B. vi. 82, t. 531, f. 3, 1849,

## Sub-F. XII. CARADRINIDI.

Caradrinidi, Step. MSS.

### 172. MYTHIMNA.

Mythimna, Och. (S. iv. 78, 1816). Mithymna, Sodoff.-Bull. S. I. Mosc. 14, 1837. Leucania, p., Guén.—(Ann. E. S. Fr. x. 237, 1841).

### a. ALETIA, Hüb. V. 239, 1816.

1. MYTHIMNA TURGA. The Double Line.

B. M.

Phalana-N. turca, Linn. F. S. ii. No. 1221, 1761. Mythimna turca, Step. H. ii. 150, 1829. West. & H. M. i. 141, t. 29, f. 1, 2, 1842. Phalana-N. volupia, Hufn. ?- (Berl. M. iii. 304, 1769).

## b. LEUCANIA, + Bois. (I. M. 2 ed. 131, 1840).

2. MYTHIMNA CONIGERA. The Brown-line Bright-eye. B. M.

Noctua conigera, Schiff. (W. V. 84, 1776). Mythinna conigera, Step. H. ii. 151, 1829. West, & H. M. i. 142, t. 29, f. 3, 4, 1842.

Noctua floccida, Esp. S. iv. (332), t. 123, Noct. 44, f. 5, 1788 -92.

## c. HYPHILARE, Hub. V. 239, 1816.

3. MYTHIMNA LYTHARGYRIA. The Clay. B. M. Noctua Lythargyria, Esp. S. iv. 341, t. 124, Noct. 45, f. 5, 6, 1788.

Phalæna-N. punctum-album. Vill. E. ii. 282, 1789.

Noctua ferruginea, Scrib. B. ii. 149, 1791.

Noctua ferrago, Fab. E. S. iii. 2, 76, 1794.

Noctua grisea, Fab. ? E. S. iii. 2, 69, 1794.

Mythimna grisea, Step. H. ii. 150, 1829. West. & H. M. i. 143, t. 29, f. 5, 1842.

Noctua unipunctina, Marsh. MSS.—Haw. (Pr. 15, 1802).

Mythimna Lythargyria, Step. H. ii. 151, 1829. West. & H. M. i. 144, t. 29, f. 6, 1842.

#### 173. MERISTIS.

Meristis, Hüb. V. 239, 1816. Grammesia, Step. H. ii. 151, 1829.

1. MERISTIS QUEBOUS. The Treble Lines.

B. M.

Noctua Quercus, Fab. S. E. 594, 1775.

Noctua trilinea, Schiff. (W. V. 84, 1776). Grammesia trilinea, Step. H. ii. 152, 1829. West. & H. M. i.

146, t. 29, f. 17, 1842.

Phalæna-N. trigrammica, Hüfn.—(Berl. M. iii. 408, 1769).

Noctua evidens, Thunb. I. S. 2, 1784.

Phalæna-N. Quercicola, Gmel. S. N. i. 5, 2535, 1788.

Noctua trilinearina, Haw. (Pr. 19, 1802).

Var. a. Noctua approximans, Haw. L. B. 249, 1810. Var. b. Noctua semifuscans, Haw. L. B. 249, 1810.

2. MERISTIS BILINEA. The Dark Treble Lines.

B. M.

Noctua bilinea, Hüb. No. t. 45, f. 217, 1799. Grammesia bilinea, Step. H. ii. 152, 1829. Caradrina bilinea, Cur. B. E. xiv. t. 651, 1837.

#### 174. CARADRINA.

Caradrina, Och.—Hüb. V. 230, 1816.

## a. Cabadrina, Hüb. ut supra.

1. CABADRINA BLANDA. The Rustic.

B. M.

Noctua blanda, Schiff. (W. V. 77, 1776). Hüb. No. t. 34, f. 162, 1799.

Caradrina superstes, Och.—Treit. S. v. 2, 260, 1825. Step. H. ii. 159, 1829.

Caradrina Plantaginis, West. & H. M. i. 144, t. 29, f. 11, 1842.

Var. a. Noctua egens, Haw. L. B. 206, 1810.

Caradrina Alsines, Step. H. ii. 156, 1829. Wood, I. E. t. 11, f. 198.

Var. b. Noctua depunctina, Haw. (Pr. App. 7, 1802).

Noctua redacta, Haw. L. B. 206, 1810.

Caradrina redacta, Step. H. ii. 155, 1829. Wood, I. E. t. 11, f. 197.

Var. c. Noctua blanda, Haw. L. B. 208, 1810,

Caradrina ambigua? Step. H. ii. 155, 1829. Wood, I. E. t. 10, f. 196.

Var. d. Noctua xanthographa, Haw. L. B. 206, 1810.

Var. e. Noctua sordida, Haw. L. B. 207, 1810.

Var. f. Caradrina lævis, Step. H. îi. 157, 1829. Wood, I. E. t. 11, f. 200.

Var. g. Caradrina implexa, Step. H. ii. 156, 1829. Wood, I. E. t. 11, f. 199.

# 2. CARADRINA ALSINES. The White-line Rustic.

B. M.

Phalæna-N. Alsines, Bork. E. S. iv. 608, 1792. Noctua Alsines, Hub. No. t. 125, f. 577, 1815.

## b. ELAPHRIA, Hib. V. 230, 1816.

3. CARADRINA MORPHEUS. The Mottled Rustic.

B. M.

Phalana-N. Morpheus, Hüfn.—(Berl. M. iii. 302, 1769). Caradrina Morpheus, Step. H. ii. 157, 1829. West. & H. M. i. 145, t. 29, f. 1314, 1842.

Phalana pulla, Beck. ?-Linn. Tr. i. 2, t. 1, f. 7, 9, 1791.

Var. a. Noctua Sepii, Hüb. No. t. 34, f. 161, 1799. Caradrina Sepii, Step. H. ii. 158, 1829.

# с. Атнетіз, р., Нйв. V. 209, 1816.

4. CARADRINA CUBICULARIS. The Pale-mottled Willow. B. M.

Noctua cubicularis, Schiff. (W. V. 72, 1776).

Caradrina cubicularis, Step. H. ii. 158, 1829. West. & H. M. i. 145, 1, 29, f. 15, 1842.

Phalana clavipalpis, Scop. ? E. C. No. 526, 1763.

Phalaua-N. grises, Hufn .- (Berl. M. iii. 412, 1769).

Noctua 4-punctata, Fab. ? S. E. 594, 1775.

Noctua leucoptera, Thunb. I. S. 41, t, 2, f. 13, 1791.

Noctua segetum, Esp. S. iv. (492), t. 150, Noct. 71, f. 4, 5, 1789-97.

### d. Telmia, Hüb. V. 227, 1816.

5. CARADRINA EXIGUA.* The Small-mottled Willow.

Noctua exigua, Hüb. No. t. 78, f. 362, 1804. Var. a. Noctua fulgens,* Hüb.-Ge. No. t. 168, f. 796, 1826?

#### 175. ACOSMETIA.

Acosmetia, Step. (Cat. ii. 110, 1829). Id. H. iii. 121, 1830. Athetis, p., Hüb. (V. 209, 1816). Hydrilla, p., Bois. (I. M. 138).

a. Hydrilla, Bois. I. M. 2 ed. 138, p.

Hydrilla, Guén. Spec. Gen. v. 236. Caradrina, p., Ochs.

1. Acosmetia caliginosa. The Reddish Buff.

B. M.

Noctua caliginosa, *Hüb. No.* t. 100, f. 474, 1810. Acosmetia caliginosa, *Step. H.* iii. 122, 1830. *Wood, I. E.* t. 17, f. 430.

Caradrina infida, Och. (S. iv. 93, 1816).

Var. a. Phytometra lutescens, Haw. L. B. 260, 1810.
Acosmetia lutescens, Step. H. iii. 122, 1830. West. & H. M. i. 244, t. 54, f. 3, 1843.
Hydrilla uliginosa, Bois. P. I. E. 2 ed. 138, 1840.

Acosmetia palustris. The Marsh Buff.
 Hydrilla palustris, Hübn. ii. f. 367. Guén. Spec. Gen. v. 237.

b. CARADRINA, p., Bois. I. E. 82, 1829.

Apamea, p., Bois. I. E. 2 ed. 116, 1840. Miana, p., Doub.—(List 7, 1847).

2. Acosmetia arcuosa. The Small-dotted Buff.

B. M.

Phytometra arcuosa, *Haw. L. B.* 260, 1810. Acosmetia arcuosa, *Step. H.*·iii. 123, 1830. *West. & H. M.* i. 245, t. 54, f. 7, 1843. Noctua arcuina, *Haw.* (*Pr.* 13, 1802).

Caradrina Duponchelii, Bois. I. E. 82, 1829.

Noctua minima, Haw. L. B. 216, 1810.
 Miana minima, Step. H. iii. 15, 1829.

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Var. a. Noctua Airæ, Frey. N. B. ii. 106, t. 162, f. 1—3, 1836. Var. b. Acosmetia Morrisii, Dale.—Nat. ii. 88, 1837.

### 176. STILBIA.

Stilbia, Step. (Cat. ii. 110, 1829). Id. H. iii. 124, 1830. Ophiusa? Bois. I. M. 99, 1829.

1. STILBIA ANOMALA. The Anomalous.

B. M.

Phytometra Anomala, Haw. Ent. Tr. i. 3:6, 1812. Geometra hybridata, Hüb. Ge. t. 96, f. 497—8, 1814. Caradrina stagnicola, Och. Treit. S. v. 2, 258, 1825. Stilbia anomalata, Step. (Cat. ii. No. 6415, 1829). Step. H. iii. 125, 1830. Cur. B. E. xiv. t. 631, 1837. West. & H. M. i. 246, t. 54, f. 8, \$, 9, \$\rightarrow\$, 1843. Ophiusa? Lathyri, Bois. I. M. 99, 1829.

### Sub-F. XIII. NONAGRIDI.

Nonagridi, Guén.—Ann. E. S. Fr. vi. 326, 1827. Nonagridæ, Dup. C. 114, 1846.

## 177, SENTA.

Senta, Step. H. iv. 297, 1834. Nonagria, p., Treit. S. v. 2, 339, 1825. Melia, B., Cur. (B. E. v. fo. 201, 1829). Meliana, Cur. (G. ii. 205, 1837). Chiloes, H-Schaff. S. iii. 226, 1849.

1. SENTA ULVE. The Silky Wainscot.

B. M.

Noctua Ulvæ, Hub. No. t. 139, f. 635, 636, 1816. Melia (Meliana) sericea, Cur. (B. E. v. fo. 201, 1829). Senta sericea, Step. H. iv. 298, 1834. Wood, I. E. t. 40, f. 1439.

Var. a. Tortrix? bipunctata,* Haw.—Ent. Tr. i. 337, 1812, Senta anella, Step. H. iv. 297, 1834.

2. SENTA FLAMMEA. The Flame Wainscot.

B. M.

Melia (Meliana) flammea, Cur. B. E. v. t. 201, 1829. Senta flammea, Step. H. iv. 297, 1834. Noctua Arundinis, Haworth, MSS. Nonagria Arundinicola, Doub. (List 7, 1847).

#### 178. CŒNOBIA.

Cœnobia, Step. MSS. Nonagria, p., Treit. S. v. 2, 339, 1825. Acosmetia, p., Step. H. iii. 120, 1829.

#### 1. CŒNOBIA RUFA. The Small Rufous.

B. M.

Phytometra rufa, Haw. L. B. 260, 1810. Acosmetia rufa, Step. H. iii. 123, 1830. Wood, I. E. t. 17, f. 431.

Nonagria despecta, Treit. S. v. 2, 311, 1825. Noctua despecta, Hüb. No. t. 160, f. 751, 752, 1826.

Acosmetia rufula, Step. (Cat. ii. No. 6411, 1829). Var. a. Acosmetia lineola, Step. H. iii. 120, 1830. Wood, I. E. t. 17, f. 432.

#### 179. NONAGRIA.

Nonagria, Och. (S. iv. 82, 1816). Enteriona, Sodoff.—Bull. S. I. Mosc. 14, 1837.

### a. Symira, p., Hüb. V. 240, 1816.

1. Nonagria fulva. The Small Wainscot.

B. M.

Noctua fulva, Hüb. No. t. 106, f. 496, 1810. Noctua pygmina, Haw. (Pr. 13, 1802). Id. L. B. 176, 1811. Leucania pygmina, Step. H. iii. 78, 1829. West. & H. M. i. 219, t. 47, f. 9, 1843.

Leucania Phragmatidis, Step. (Cat. ii. No. 6344, 1829).

Var. a. Leucania fluxa? Step. H. iii. 77, 1829. Wood, I. E. t. 15, f. 369.

Var. b. Leucania pallida, Step. H. iii. 78, 1829. Wood, I. E. t. 15, f. 371.

Var. c. Leucania neurica? Step. H. iii. 79, 1829. Wood, I. E. t. 15, f. 372.

Var. d. Leucania rosea, Step. MSS. Var. e. Leucania palustris, Step. MSS.

2. Nonagria extrema. The Tipped Wainscot. Noctua extrema, Hüb. No. t. 88, f. 412, 1806.

B. M.

- b. CALAMIA, p., Hüb. ? V. 240, 1816.
- Nonagria Hellmanni. The Mere Wainscot.
   Noctua Hellmanni, Frey. N. B. v. 79, t. 429, f. 3, 1842?
   Leucania? Hellmanni, Ever. Lep. V.-U. 270, 1844.
   Var.? a. Noctua fluxa, Hüb. No. t. 88, f. 413, 1806.
  - c. Nonagria, t., Hüb. V. 241, 1816.
- Nonagria neurica. The Brown-veined Wainscot.
   Noctua neurica, Hüb. No. t. 82, f. 381, 1804.
   Var. a. Noctua neurica, Hüb. No. t. 144, f. 659—661, 1816.
- Nonagria geminipuncta. The Twin-spotted Wainscot. B. M. Noctua geminipuncta, Hatchet.—Ent. Tr. i. 327, t. 9, f. 2, 1812.
   Noctua paludicola, Hüb. No. t. 139, f. 637, 1816.
- Var.? a. Noctua guttans, Hüb. No. t. 137, f. 628, 629, 1816.

  6. Nonagria Cannæ. The Reed Wainscot.
- 6. Nonagria Cannæ. The Reed Wainscot.

  Nonagria Cannæ, Och. (S. iv. 82, 1816). Treit. S. v. 2, 325, 1825. West. & H. M. i. t. 46, f. 11, 1843.

  Noctua Algæ, Esp. S. iv. (441), t. 140, Noct. 61, f. 1, 2, 1788

  —96.

Noctua nervosa, Lang. V. ii. 142, 1789. Noctua Arundinis, Hüb. No. t. 83, f. 386, 1805.

Nonagria Typhæ. The Bullrush.
 Noctua Typhæ. Thunb.? I. S. 3, 1784. Esp. S. iv. (442), t. 140, Noct. 61, f. 3—5, 1788—96. West. & H. M. i. 214, t. 46, f. 1—3, 1843.

Noctua Arundinis, Scheven.—Fab. M. ii. 141, 1787. Noctua latifolia, Lang. V. ii. 142, 1789.

- d. LEUCANIA, p., Bois. I. M. 2 ed. 131, 1840.
- 8. Nonagria? crassicornis. The Large Wainscot. B. M. Noctua crassicornis, *Haw. L. B.* 173, 1810. Nonagria crassicornis, *Slep. H.* ii. 72, 1829. *West. & H. M.* i. 214, t. 46, f. 4—10, 1843. Noctua Bathyerga, *Frey. B.* ii. 122, t. 170, f. 1, 1836.

Var. a. Noctua pilicornis, Haw.—Ent. Tr. i. 336, 1812.

Nonagria pilicornis, Step. H. iii. t. 20, f. 1, 1829. Var. b. Nonagria lutosa, Cur. (G. i. 154, 1830). West. & H. M. i. l. c. f. 9.

#### Sub-F. XIV. LEUCANIDI.

Leucanidi, Guén.—Ann. E. S. Fr. vi. 331, 1837. Leucanides, Bois. I. M. 2 ed. 131, 1840.

### 180. LEUCANIA.

Leucania, Och. (S. iv. 81, 1816). Donachlora, Sodoff.—Bull. S. I. Mosc. 14, 1837.

### a. Symira, p., Hüb. V. 240, 1816.

- Leucania pudorina, Schiff. (W. V. 85, 1776).
   Leucania pudorina, Step. H. iii. 80, 1829.
   West. & H. M. i. 218, t. 47, f. 13, 14, 1843.
- Var. a. Noctua impudens, Hüb. No. t. 47, f. 309, 1800.
- LEUCANIA IMPUBA. The Smoky Wainscot.
   Noctua impura, Hüb. No. t. 85, f. 396, 1805?
   Leucania impura, Step. H. iii. 75, 1829. West. & H. M. i. 216, t. 47, f. 3, 4, 1842.
   Noctua fuligosina, Haw. (Pr. 12, 1802).
   Noctua fuliginosa, Sam. (I. 29, 1819).
   Var. a. Noctua punctina, Haw. L. B. 174, 1810.
   Leucania punctina, Step. H. iii. 75, 1829. Wood, I. E. t. 15. f. 563.

## b. LEUCANIA, Hüb. V. 241, 1816.

3. LEUCANIA COMMA. The Shoulder-striped Wainscot. B. M. Phalæna-N. Comma, *Linn. F.* ii. No. 1191, 1761. Leucania Comma, *Step. H.* iii. 73, 1829. *West. & H. M.* i. 216, t. 47, f. 2, 1843. Noctua pallens, *Esp. S.* iv. t. 90, *Noct.* 11, f. 2, 1787. Noctua turbida, *Hüb. No.* t. 47, f. 228, 1800.

Q. Noctua congener (turbida), *Hüb. No.* t. 135, f. 618, 1816.

Noctua ramilinea, Haw. MSS.

- 4. LEUCANIA LITTORALIS. The Shore Wainscot.

  Leucania litoralis, Cur. B. E. iv. t. 157, 1827.

  Leucania littoralis, Step. H. iii. 74, 1829.
- B. M.
- 5. LEUCANIA OBSOLETA. The Obscure Wainscot. B. M. Noctua obsoleta, Hüb. No. t. 48, f. 233, 1799.

  Leucania obsoleta, Sien. H. iii. 74, 1829. West. & H. M.;
  - Noctua obsoleta, Hub. No. t. 48, f. 233, 1799. Leucania obsoleta, Step. H. iii. 74, 1829. West. & H. M. i. 217, t. 47, f. 5, 1843.
- 6. Leucania straminea. The Southern Wainscot. B. M. Leucania straminea, Treit. S. v. 2, 297, 1825.
  Nonagria Vectis, Cur. B. E. x. t. 459, 1833.
  Nonagria? Vectis, Step. H. iv. 390, 1835.
- Leucania Pallens. The Common Wainscot.
   Phalæna-N. pallens, Linn. S. Nat. i. 510, 1758.
   Leucania pallens, Step. H. iii. 76, 1829. West. & H. M, i. 217, t. 47, f. 7, 8, 1843.
- Var. a. Noctua rufescens, Haw. L. B. 175, 1810. Leucania rufescens, Step. H. iii. 76, 1829. Wood, I. E. t. 15, f. 366, 1836.
- Var. b. Leucania arcuata, Step. H. iii. 76, 1829. Wood, I. E. t. 15, f. 364, 1836.
- Var. c. Leucania suffusa, Step. H. iii. 77, 1829. Wood, I. E. 1. 15, f. 367, 1836.
- Noctua ectypa, Hib, ? No. t. 48, f. 231, 1799. Var. d. Leucania ochracea, Step. H. iii, 77, 1829. Wood, I. E, L 15, No. 368.

Var. e. Phalana-N. pallida, Bork. ? E. S. iv. 713, 1792,

### 181. CALAMIA.

Calamia, Hüb. V. 240, 1816. Symira, p., Step. (Cat. ii. 102, 1829).

1. CALAMIA PHRAGMITIDIS. The Fen Wainscot. B. M. Noctua Phragmitidis, Hüb. No. t. 47, f. 330, 1801. Calamia Phragmitis, Hüb. (V. 240, 1816). Noctua semicana, Esp. S. iv., Sup. 34, t. 189, Noct. 110, f. 5, 1802.

Symira musculosa, Step. (C. ii. No. 6350, 1829). Leucania Phragmatidis, West. & H. M. i. t. 47, f. 16; t. 48, f. 1, 1843.

#### 182. SIMYRA.

Simyra, Och. (S. iv. 81, 1816, 3). Treit. S. v. 2, 280, 1825. Symira, p., Hùb. V. 240, 1816, 9. Asema, Sodoff.—Bull. S. I. Mosc. 14, 1837.

1. SIMYRA VENOSA. The Powdered Wainscot.

B. M.

Phalæna-N. venosa, Bork. E. S. iv. 716, 1792. Simyra venosa, Step. H. iii. 82, 1829. West. & H. M. i. 220, t. 48, f. 3, 1843. Noctua albovenosa, Goëze. & E. B. iii. 251, 1780. Noctua degener, Hüb. No. t. 81, f. 380, 1804. Noctua atomina, Haw. (Pr. 13, 1802). Id. L. B. 175, 1810.

#### 183. ORIA.

Oria, Hüb. V. 240, 1816. Simyra, p., Step. H. iii. 81, 1829. Synia, Dup. C. 120, 1846.

Ohla Musculosa. The Tawny-veined Wainscot.
 Noctua musculosa, Hüb. No. t. 78, f. 363, 1804.
 Leucania musculosa, West. & H. M. i. t. 48, f. 2, 1843.
 Phalæna-N. pudorina, Bork. E. S. iv. 720, 1792.
 Simyra nervosa, Step. H. iii. 82, 1829.

## Sub-F. XV. CUCULLIDI.

Cucullidi, Step. MSS.

### 184. PHLOGOPHORA.

Phlogophora, *Treit. S. v.* 1, 369, 1825. Trigonophora, p., *Hüb. V.* 217, 1816. Solenoptera, *Dup. C.* 134, 1846.

1. Phlogophora метісиlosa. The Angle-shades. В. М. Phalæna-N. meticulosa, *Linn. S. Nat.* i. 513, 1758. Phlogophora meticulosa, *Step. H.* iii. 83, 1829. *West. & H. M.* i. 221, t. 48, f. 5, 6, 1843.

2. Phlogophora empyrea. The Great Angle-shades.

Phlogophora empyrea, Hübn. 646. Guenée, Spec. Gen. vi. 66. Phalæna flammea, Esper. pl. 53.

#### 185. CUCULLIA.

Cucullia, Schr. F. B. ii. 2, 157, 1802. Lophia, Sodoff.—Bull. S. I. Mosc. 15, 1837.

a. CUCULLIA, Hüb. V. 246, 1816.

- 1. CUCULLIA VERBASCI. The Mullein.

  Phalæna-N. Verbasci, Linn. S. Nat. i. 515, 1758.

  Cucullia Verbasci Stan H iii 95 1890 West & H M i
  - Cucullia Verbasci, Step. H. iii. 85, 1829. West. & H. M. i. 221, t. 48, f. 7, 8, 1843.
- CUCULLIA SCROPHULABLE. The Water Betony.
   Noctua Scrophulariæ, Schiff. (W. V. 312, 1776).
   Cucullia Scrophulariæ, Step. H. iii. 85, 1829. West. & H. M. i. 222, t. 48, f. 9, 10, 1843.
   Phalæna Verbasci, Don. B. I. viii. 13, t. 257, 1799.
- 3. CUCULLIA LYCHNITIS. The Striped Lychnis.

  Cucullia Lychnitis, Ramb.—Ann. E. S. Fr. ii. 17, t. 1, f. 3 c, 1833. West. & H. M. i. 223, t. 48, f. 13, 14, 1843.

  Cucullia Scrophulariæ, var., Treit. (Sup. ii. 129, 1835).
  - b. EUDER F.A., Hüb. (V. 245, 1816).
- CUCULLIA ASTERIS. The Starwort.
   Noctua Asteris, Schiff. (W. V. 312, 1776).
   Cucullia Asteris, Cur. B. E. i. t. 45, 1824. Step. H. iii. 86, 1829.
  - c. Eucalimia, Hüb. V. 245, 1816.
  - 5. Cucullia Gnaphalii.* The Shepherd's Purse.

    Noctua Gnaphalii, Hüb. No. t. 126, f. 582, 583, 1815.
    Cucullia Gnaphalii, Step. H. iii. 90, 1829.
    Cucullia Thapsiphaga, Step. H. iii. 87, 1829.

Cucullia Solidaginis, Step.—Tr. Ent. S. ii. 57, t. 3, f. 7, 1837.

6. CUCULLIA ABSINTHII. The Wormwood.

B. M·

Phalæna-N. Absinthii, *Linn. F.* ii. No. 1182, 1761. Cucullia Absinthii, *Step. H.* iii. 96, 1829. *West. & H. M.* i. 225, t. 49, f. 5, 1843. Phalæna-N. punctigera, *Hüfn.—(Berl. M.* iii. 416, 1769).

d. Callænia, Hüb. V. 246, 1816.

7. CUCULLIA UMBRATICA. The Shark.

В. М.

Phalæna-N. Umbratica, *Linn. S. Nat.* i. 515, 1758. Cucullia Umbratica, *Step. H.* iii. 87, 1829. *West. & H. M.* i. 225, t. 49, f. 6, 7, 1843.

Var. a. Noctua Tanaceti, *Haw. L. B.* 165, 1810. Cucullia Tanaceti, *Step. H.* iii. 88, 1829, 3. Wood, *I. E.* t. 16, f. 382.

Var. b. Noctua Lactucæ, *Haw. L. B.* 166, 1810. Cucullia Lactucæ, *Step. H.* iii. 88, 1829, ♀. *Wood, I. E.* t. 16, f. 384.

Var. c. Noctua Lucifuga, *Haw. L. B.* 166, 1810. Cucullia Lucifuga, *Step. H.* iii. 89, 1829, Q. *Wood, I. E.* t. 16, f. 383.

8. Cucullia Chamomillæ. The Chamomile Shark. B. M.

Noctua Chamomillæ, Schiff. (W. V. 73, 1776). Cucullia Chamomillæ, Step. H. iii. 89, 1829. West. & H. M. i. 226, t. 49, f. 14, 15, 1843.

3. Noctua fissina, *Haw.* (Pr. 12, 1802). Cucullia fissina, Step. H. iii. 90, 1829.

Var. a. Noctua Chrysanthemi, Hüb. ? No. t. 119, f. 606, 1815.

# e. ABGYRITIS, Hüb. V. 247, 1816.

**?9. Cucullia Artemisiæ.* The Green Silver Spangle. B. M. Noctua Artemisiæ, Schiff. (W. V. 322, 1776). Cucullia Artemisiæ, Schipf. H. iii. 91, 1829. West. & H. M. i. 227, t. 49, f. 16, 1843. Noctua argentea, Fues. A. 15, t. 5, 1781.

#### 186. PERIPHANES.

Periphanes, Hüb. V. 247, 1816. Chariclea, Step. (Cat. ii. 104, 1829). Id. H. iii. 92, 1829.



Omia, p., Hüb. (V. 244, 1816). Cleophana, p., Bois. I. M. 2 ed. 151, 1840. Rhahdophana, Sodoff.—Bull. S. I. Mosc. 15, 1837

1. CALOPHASIA LINARIÆ. The Flax Moth.

Noctua Linariæ, Schiff. (W. V. 73, 1776). Calophasia Linariæ, Step. H. iii. 94, t. 29, f. 2, 184 Phalæna-N. lunula, Hüfn.—(Berl. M. iii. 394, 174 Noctua stictica, Fab. M. ii. 173, 1787.

## 188. ACTINOTIA.

Actinotia, Hüb. V. 244, 1816. Cloantha, Bois. I. M. 2 ed. 150, 1840. Cleophana, p., Treit. Sup. ii. 281, 1835.

1. ACTINOTIA PERSPICILLARIS. The Purple Cloud.

Phalæna-N. perspicillaris, Linn. F. ii. No. 1198, 1
Calophasia? perspicillaris, Step. (H. iii. 94, 1829).
Cloantha perspicillaris, West. & H. M. i. 230, t. 5

# Sub-F. XVI. PLUSIDI.

Plusidi, *Bois.* (I. M. 91, 1829). Plusiæ, *Hüb. V.* 251, 1816. Phalæna triplasia, Esp. S. iv. (612), t. 179, Noct. 90, f. 1—3, 1790—1800. Don. B. I. ix. 23, t. 298, 1800. Noctua Asclepiadis, Haw. L. B. 246, 1810.

2. ABROSTOLA TRIPLASIA. The Dark Spectacle.

B. M.

Phalæna-N. triplasia, Linn. S. Nat. i. 517, 1758. Abrostola triplasia, Step. H. iii. 96, 1829. West. & H. M. i. 229, t. 50, f. 6, 7, 1843.

#### 190. EUCHALCIA.

Euchalcia, Hüb. V. 250, 1816. Abrostola, p., Och. (S. iv. 88, 1816). Plusia, p., Bois. (I. M. 92, 1829).

1. EUCHALCIA ILLUSTRIS. The Purple Shades.

B. M.

Noctua illustris, Fab. M. ii. 164, 1787. Abrostola? illustris, Step. H. iii. 98, 1830. Plusia illustris, Cur. B. E. xvi. t. 731, 1839.

Q. Noctua cuprea, Esp. S. iv. (199), t. 110, Noct. 31, f. 3, 4, 1787

—89.

#### 191. PLUSIA.

Plusia, Och. (S. iv. 89, 1816). Treit. S. v. 3, 134, 1826.

а. Аптоскарна, Нйв. V. 251, 1816.

1. Plusia Iota. The Plain Golden Y.

B. M.

Phalæna-N. Iota, *Linn. S. Nat.* i. 513, 1758. Plusia percontationis, *Och.* (S. iv. 90, 1816). *Step. H.* iii. 101, 1830. *West.* § H. M. i. 231, t. 51, f. 4, 1843. Var. a. Plusia Lambda-aurina, *Step. MSS*.

2. PLUSIA PULCHRINA. The Beautiful Golden Y.

Noctua pulchrina, Haw. (Pr. 16, 1802).

В. М.

Noctua interrogationis, Esp. S. iv. (225), t. 113, Noct. 34, f. 1, 2, 1789-90.

Noctua Iota, Hüb. No. t. 58, f. 282, 1800.

Plusia Iota, Step. H. iii. 100, 1830. West. & H. M. i. 231, t. 52, f. 1, 2, 1843.

Plusia inscripta, Doub. (List. 11, 1847).

Var. a. Phytometra pulchrina (Iota γ.), Haw. L. B. 256, 1810.

Var. b. Noctua Gamma-aurina, Haw. (Pr. 16, 1802). Aber.? Noctua inscripta,* Esp. S. iv. 229, t. 113, f. 5, 1789.

3. PLUSIA INTERROGATIONIS. The Scarce Silver Y. B. M.

Phalæna-N. interrogationis, Linn. S. Nat. i. 513, 1758. Plusia interrogationis, Step. H. iii. 102, 1830. West. & H. M. i. 235, t. 51, f. 6, 1843.

Noctua conscripta, Hub. Beit. ii. 52, t. 4, U., 1786. Phalæna-N. æmula, Bork. E. S. iv. 789, 1792. Noctua subpurpurina, Haw. (Pr. 16, 1802).

Var. a. Phalæna aurosignata, Don. B. I. xiii. 43, t. 453, f. 1, 1808. Var. b. Noctua interrogationis, Hiib. No. t. 180, f. 854, 1836. Var. c. Plusia Gamma-argentina, Step. MSS.

4. PLUSIA GAMMA. The Silver Y.

B. M Phalæna-N. Gamma, Linn, S. Nat. i. 513, 1758. Plusia Gamma, Step. H. iii. 103, 1830. West. & H. M. i. 232. t. 51, f. 7, 8, 1843.

Var. a. Plusia Gamma-fracta, Step. MSS.

# b. DIACRYSIA, Hüb. V. 252, 1816.

5. PLUSIA CHRYSITIS. The Burnished Brass.

B. M.

Phalana-N. chrysitis, Linn. S. Nat. i. 513, 1758. Plusia chrysitis, Step. H. iii, 105, 1830. West. & H. M. I. 234, t. 51, f. 12, t. 52, f. 6, 1843.

6. PLUSIA ORICHALCEA. The Scarce Burdished Brass. B. M.

Noctua orichalcea, Fab. S. E. 607, 1775.

Plusia orichalcea, Step. H. iii. 105, 1830. West. & H. M. i. 234, t. 52, f. 7, 1843.

Noctua orychalcea, Hüb. Beit. ii. 28, t. 4, f. W. 1786.

Noetua chryson, Esp. S. iv. (446), t. 141, Noct. 62, f. 7, 1788 -- 96.

Noctua ærifera, Sow. B. M. i. 59, t. 29, 1805.

# c. Chhysaspidea, Hub. V. 252, 1816.

7. PLUSIA BRACTEA. The Gold Spangle.

B. M.

Noetua Bractea, Schiff. (W. V. 314, 1776). Noctua Bractea, Sov. B. M. i. 57, t. 28, 1805. Plusia Bractea, Step. H. iii. 106, 1830. Phalæna-N. securis, Vill. E. ii. 271, 1789.

8. Plusia Festucæ. The Gold Spot.

B. M.

Phalæna-N. Festucæ, Linn. S. Nat. i. 513, 1758. Plusia Festucæ, Step. H. iii. 107, 1830. West. & H. M. i. 234, t. 52, f. 8, 1843.

## Sub-F. XVII. HELIOTHIDI.

Heliothidi, Guén.—Ann. E. S. Fr. x. 53, 1841. Heliothentes, Hüb. V. 258, 1816.

#### 192. HELIOTHIS.

Heliothis, Och. (S. iv. 91, 1816). Treit. S. v. 3, 215, 1826. Heliotis, Sodoff.—Bull. (S. I. Mosc. 15, 1837).

## a. HELIOTHIS, Och. ut supra.

1. HELIOTHIS MARGINATA. The Bordered Sallow.

B. M.

Noctua marginata, Fab. E. S. 610, 1775.

Heliothis marginata, Step. H. iii. 108, 1830. West. & H. M. i. 236, t. 53, f. 1, 1843.

Noctua rutilago, Schiff. (W. V. 86, 1776).

Phalæna-N. conspicua, Bork. E. S. iv. 123, 1792.

Phalæna limbata, Stew. E. ii. 188, 1802.

Noctua marginago, Haw. (Pr. 14, 1802). Id. L. B. 235, 1810. Var. a. Phalæna-N. umbra, Hüfn.?—(Berl. M. iii. 294, 1769). Noctua Umbrago, Esp. S. iv. Sup. 21, t. 185, Noct. 106, f. 7, 8, 1790?

# b. Melicleptria, Hüb. V. 262, 1816.

- 2. Heliothis armigera. The Scarce Bordered Straw. B. M.? Noctua armigera, Hüb. No. t. 79, f. 370, 1804.
- 3. Heliothis peltigera. The Bordered Straw. B. M. Noctua peltigera, Schiff. (W. V. 89, 1776). Heliothis peltigera, Step. H. iii. 109, 1830. West. & H. M. i. 236, t. 53, f. 2, 3, 1843. Noctua florentina, Esp. S. iv. (422), t. 135, Noct. 56, f. 2, 1788—95.

Phalæna-N. scutigera, Bork. E. S. iv. 93, 1792. Phalæna straminea, Don. B. I. ii. 65, t. 61, 1793.

Noctua barbara, Fab. E. S. iii. 2, 111, 1794.

4. Heliothis scutosa. The Spotted Clover Moth. Noctua scutosa, Schiff. (W. V. 89, 1776).

B.M.

Noctua scutosa, Schiff. (W. V. 89, 1776). Heliothis scutosa, Cur. B. E. xiii. t. 595, 1836. Phalæna-N. stigmosa, Vill. E. ii. 280, 1789.

5. HELIOTHIS DIPSACEA. The Marbled Clover. .

B. M.

Phalæna-N. dipsacea, Linn. S. N. ii. 856, 1767. Phalæna dipsacea, Don. B. I. x. 9, t. 327, f. 3, \$\frac{2}{3}\$, 1801. Heliothis dipsacea, Step. H. iii. 109, 1830. West. & H. M. i. 236, t. 53, f. 4, \$\frac{2}{3}\$, 1843. Phalæna-N. viridiplaca, Hüfn.—(Berl. M. iii. 406, 1769).

#### 193. ANARTA.

Anarta, Och. (S. iv. 90, 1816). Treit. S. v. 3, 200, 1826.

- a. Charelia, Sodoff.—Bull. S. I. Mosc. 15, 1837.
- 1. Anarta Myrtilli. The Beautiful Yellow Underwing. B. M. Phalæna-No. Myrtilli, Linn. F. ii. No. 1168, 1761.

  Anarta Myrtilli, Cur. B. E. iii. t. 145, 1826. Step. H. iii.

  111, 1830.

Phalæna-No. Ericæ, *Hüfn.*—(*Berl. M.* iii. 292, 1769). Var. a. Noctua albirena, *Haw. L. B.* 163, 1810.

ANABTA CORDIGERA. The Small Dark-yellow Underwing. B. M. Noctua cordigera, Thunb. M. A. Up. vi. f. 4, 1792.
 Anarta cordigera, Step. H. iii. 111, 1830. Wood, I. E. t. 52, f. 1670, 1839.
 Noctua cincta, Schnei. M. i. 529, 1791.
 Noctua albirena, Hüb. No. t. 21, f. 99, 1798.

# b. Sympistris, Hüb. V. 261, 1816.

[B. M.

3. ANARTA MELANOPA. The Broad-bordered White Underwing.

Noctua melanopa, Thunb. I. S. 42, t. 2, f. 12, 1791.

Noctua vidua, Hüb. No. t. 86, f. 403, 1806.

Anarta vidua, West. & H. M. i. 238, t. 53, f. 9, 1843.

Var. a. Noctua tristis, Hüb. No. t. 95, f. 446, Q, 1808.

#### 194. PANEMERIA.

Panemeria, Hüb. V. 262, 1816. Gymnopa, Step. H. iii. 112, 1829. Heliodes, Guén.—(Ann. E. S. Fr. x. 61, 1841).

PANEMERIA ARBUTI. The Small Yellow Underwing. B. M. Noctua Arbuti, Fab. S. E. 619, 1775.
 Phalæna-N. domestica, Hüfn.—(Berl. M. iii. 1769).
 Noctua Heliaca, Schiff. (W. V. 94, 1776).
 Gymnopa Heliaca, Step. H. iii. 112, 1830. Wood, I. E. t. 17, f. 414, 1835.
 Noctua policula, Lang. V. ii. 159, 1789.

Noctua fasciola, Esp. S. iv. t. 163, f. 1, 1789. Noctua Arbuti, Esp. S. iv. 555, 1798.

# Sub-F. XVIII. ACONTIDI.

Acontidi, Guén.—Ann. E. S. Fr. x. 219, 1841. Acontides, Bois. I. M. 2 ed. 165, 1840.

#### 195. ACONTIA.

Acontia, Och. (S. iv. 91, 1816). Treit. S. v. 3, 237, 1826. Heliothera, Sodoff.—(Bull. S. I. Mosc. 15, 1837).

# · a. ÆDIA, Hüb. V. 261, 1816.

1. Acontia luctuosa. The Four-spotted.

B. M.

Noctua luctuosa, Schiff. (W. V. 90, 1776).

Acontia luctuosa, Step. H. iii. 113, 1830.

238, t. 53, f. 11, 1843.

Noctua leucomela, Fuesl. S. I. 39, 1775.

Noctua Italica, Fab. S. I. ii. 218, 1781.

Phalæna-N. Astroites, Vill. E. ii. 263, 1789.

Noctua leucomelina, Haw. (Pr. 12, 1802).

# b. TABACHE, Hüb. V. 261, 1816.

*?2. Acontia Solaris. The Pale Shoulder.

B. M.

Noctua Solaris, Schiff. (W. V. 90, 1776). Acontia Solaris, Step. H. iii. 113, t. 29, f. 3, 1829. Phalæna-N. lucida, *Hiifn.*—(*Berl. M.* iii. 302, 1769). Noctua albicollis, *Fab. Sp. I*. ii. 218, 1781. Phalæna-N. rupicola, *Bork. E. S.* iv. 79, 1792.

*3. ACONTIA CALORIS.* The Marbled Beauty.

Noctua Caloris, Hüb. No. t. 80, f. 372, 1804. Acontia Caloris, Step. H. iii. 114, 1830. Wood, I. E. t. 17, f. 417, 1436.

# Sub-F. XIX. EMMELIDI.

Emmelidi, Step. MSS. Agrophilidæ, Dup. C. 187, 1846.

## 196. EMMELIA.

Emmelia, Hüb. V. 254, 1816. Agrophila, Bois. I. M. 2 ed. 175, 1840. Erastria, A., Och. (S. iv. 92, 1816). Hemeraptera, Sodoff.—Bull. S. I. Mosc. 16, 1837.

1. EMMELIA SULPHURALIS. The Spotted Sulphur.

B. M.

Phalæna-Py. sulphuralis, Linn. S. Nat. ii. 881, 1767. Erastria? sulphuralis, Step. H. iii. 116, 1830. West. & H. M. i. 242, t. 53, f. 16, 1843. Phalæna trabealis, Scop.? C. 240, 1763. Noctua sulphurea, Schiff. (W. V. 93, 1776). Bombyx Iugubris, Fab. G. M. 280, 1777. Phalæna-N. Arabica, Bork. E. S. iv. 807, 1792.

# 197. HYELA.

Hydrelia, Step. MSS. Hydrelia, Guén.—(Ann. S. E. Fr. x. 227, 1831).]

a. Eustrotia, Hilb. V. 253, 1816.

1. HYELA UNCANA. The Silver Hook.

B. M.

Phalana-To. uncana, Linn. F. ii. No. 1305, 1761. Erastria? uncana, Step. H. iii. 117, 1830. West. & H. M. i. 241, t. 53, f. 15, 1843. Phalana-N. singularis, Hüfn.—Berl. M. iii. 396, 1769).

Noctua unca, Schiff. (W. V. 91, 1776).

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## b. Argyrostrotis, Hüb. V. 253, 1816.

#### 2. HYELA BANKIANA. The Silver Barred.

B. M.

Pyralis Bankiana, Fab. S. E. 645, 1775. Erastria Bankiana, Step. H. iii. 117, 1830. West. & H. M. i. 242, t. 53, f. 17, 1843. Tortrix Olivana, Schiff. (W. V. 126, 1776). Noctua argentula, Hub. Beit. i. 9, t. 2, F., 1786. Noctua olivea, Hüb. No. t. 60, f. 292, 1800.

# Sub-F. XX. MICRADI,

Micradi, Step. MSS. Anthophilidæ, Dup. C. 184, 1846.

# 198. EROMENE.

Eromene, Hüb. V. 256, 1816. Micra, p., Guén.—Ann. E. S. Fr. x. 225, 1841. Anthophila, Bois. I. M. 2 ed. 173, 1840.

1. EROMENE OSTRINA.* The Purple Marbled.

Noctua ostrina, Hüb. No. t. 85, f. 399, 1805. Erastria ostrina, Cur. B. E. iii. 140, 1826. Step. H. iii. 119, 1830.

#### 199. TROTHISA.

Trothisa, Hüb. V. 256, 1816. Micra, Guén.—(Ann. E. S. Fr. x. 224, 1841.

*?1. TROTHISA HAWORTHANA. The Small Marbled. B. M. Phytometra minuta, *Haw.* 265, 1810. Micra Haworthana, *West. & H. M.* i. 243, t. 53, f. 20, 1843.

# Sub-F. XXI. ERASTRIDI.

Erastridi, Step. MSS. Noctuo-Phalænidæ, Dup. C. 192, 1846.

## 200. ERASTRIA.

Erastria, Och. (S. iv. 92, 1816, 3). Treit. S. v. 3, 250, 1826. Hapalotis, Hüb. V. 254, 1816, 9.

I. ERASTRIA VENUSTULA. The Rosy Marbled.

B. M.

Noctua venustula, Hüb. Beit. ii. 78, t. 4, Q., 1786. Erastria venustula, Step. H. iii. 118, 1830. West. & H. M. i. 241, t. 53, f. 18, 1843,

Pyralis Hybrerana, Fab. ? E. S. iii, 2, 247, 1794.

2. ERASTRIA FUSCULA. The Marbled White Spot.

B. M.

Noctua fuscula, Schiff. (W. V. 89, 1776). Erastria fuscula, Step. H. iii. 119, 1830. Cur. B. E. viii. t. 356, 1831. Noctua polygramma, Esp. S. iv. (470), t. 146, Noct. 67, f. 7.

1789 - 96.

Phalæna-N. præduncula, Bork. E. S. iv. 175, 1792. Var. a. Phytometra albilinea, Haw. L. B. 261, 1810. Erastria albidilinea, Step. H. iii. 120, 1830.

## 201. PROTHYMIA.

Prothymia, Hub. V. 282, 1816. Phytometra, § 3 p., Haw. L. B. 263, 1810. Authophila, Och. (S. iv. 93, 1816). Phytometra, Step. H. iii. 120, 1829. Heliomanes, Sodoff.-Bull. (S. I. Mosc. 16, 1837).

1. PROTHYMIA ENEA. The Small Purple Barred.

B. M.

Noctua ænea, Schiff. (W. V. 85, 1776). Phytometra ænea, Step. H. iii. 121, 1830. West. & H. M. L. 244, t. 54, f. 2, 1843. Phalæna laceata, Scop. P. C. No. 363, 1763. Noctua olivacea, View. T. V. ii. 85, 1790.

Noctua latruncula, Esp. S. iv. (557), t. 163, Noct. 84, f. 2. 1789-98.

# Sub-F. XXII. OPHIUSIDI.

Ophiusidi, Guén. - Ann. E. S. Fr. x. 71, 1841.

# 202. OPHIUSA.

Ophiusa, Och. (S. iv. 93, 1816). Treit. S. v. a, 288, 1826. Ophiussa, Hub. V. 266, 1816. Hemachra, Sodoff,-(Bull. S. I. Mose. 16, 1837). Toxocampa, Guén.—Ann. E. S. Fr. x. 75, 1841.

1. OPHIUSA PASTINUM. The Blackneck.

B. M.

Ophiusa Pastinum, Treit. S. v. 3, 297, 1826. Noctua Lusina, Haw. (Pr. 13, 1802). Phytometra Lusoria, Haw. L. B. 259, 1810. Ophiusa Lusoria, Step. H. iii. 125, 1830. Cur. B. E. x. t. 475, 1833.

#### 203. OPHIODES.

Ophiodes, Guén.—Ann. E. S. Fr. x. 77, 1841. Phoberia, p., Hüb. V. 267, 1816.

OPHIODES LUNARIS.* The Lunar Double Stripe.
 Noctua lunaris, Schiff. (W. V. 94, 1776).
 Noctua augur, Esp. S. iv. 67, t. 87, Noct. 8, f. 4, 5, 1787.
 Phalæna-N. fluctuans, Vill. E. ii. 263, 1789.
 Noctua meretrix, Fab. E. S. iii. 2, 60, 1794.

# Sub-F. XXIII. CATOCALIDI.

Catocalidi, Guén.—Ann. E. S. Fr. x. 78, 1841. Catocalides, Bois. I. M. 2 ed. 166, 1840.

## 204. MORMO.

Mormo, Och. (S. iv. 70, 1816). Mania, Treit. S. v. 1, 294, 1825.

1. Mormo maura. The Old Lady.

B. M.

Phalæna-N. maura, Linn. S. Nat. i. 512, 1758. Mormo maura, Step. H. iii. 129, 1830. West. & H. M. i. 248, t. 55, f. 1, 2, 1843. Noctua Lemur, Meineke.—Naturf. vi. 112, 1775.

#### 205. CATOCALA.

Catocala, Schr. F. B. ii. 2, 158, 1802.

a. CATOCALLA, Hüb. V. 276, 1816.

1. CATOCALA FRAXINI. The Clifden Nonpareil.

**В. М.** 

Phalæna-N. Fraxini, Linn. S. Nat. i. 512, 1758. Catocala Fraxini, Step. H. iii. 131, 1830. West. & H. M. i. 248, t. 55, f. 3, 4, 1843.

 $\mathcal{E}$   $\mathcal{U}$ 

# b. EUNETES, Hub. V. 276, 1816.

2. CATOGALA NUPTA. The Red Underwing.

B. M.

Phalama-N. Nupta, Linn. S. Nat. ii. 841, 1767. Catocala Nupta, Step. H. iii. 132, 1830. West. & H. M. i. 249, t. 55, f. 5, 1843.

Phalena Pacts, Harr. Aur. t. 18, f. 9 m, 1773? Var. a. Noetua Concubina, Hüb, No. t. 69, f. 329, 1801.

# c. ASTIOTES, Hüb. V. 277, 1816.

- CATOCALA SPONSA. The Dark Crimson Underwing.
   Phalama-N. sponsa, Linn. S. Nat. ii. 841, 1767.
   Catocala sponsa, Step. H. iii. 133, 1830. West. & H. M. i. 250, t. 56, f. 1, 2, 1843.
- CATOCALA PROMISSA. The Light Crimson Underwing. B. M. Phalæna-N. promissa, Schiff. (W. V. 90, 1776).
   Catocala promissa, Step. H. iii. 134, 1830. West. & H. M. i. 250, t. 56, f. 3, 15, 1843.

Var. a. Hemigeometra conjuncta, Haw. L. B. 269, 1810, Catocala conjuncta, Step. H. iii. 135, 1830. West. & H. M. i. 250, t. 56, f. 4.

Var. b. Noctua Mneste, Hub. No. t. 123, f. 569, 1814.

# Sub-F. XXIV. PHALÆNOIDI.

Phalænoidi, Guén,-Ann. E. S. Fr. x. 217, 1841.

## 206. BREPHOS.

Brephos, Och. (S. iv. 96, 1816). Brepho, Hüb. leste Och. supra. Archiëaris, Hüb. V. 280, 1816, 9. Catoxanthia, Sodoff. (Bull. S. I. Mosc. 16, 1837).

1. Brephos Parthenias. The Orange Underwing. B. M. Phalæna-B. Parthenias, Linn. F. ii. No. 1160, 1761. Bombyx Vidua, Fab. E. S. iii. 1, 468, 1794. Hemigeometra notha, Haw. L. B. 269, 1810. Brepha notha, Cur. B. E. iii. t. 121, 1826. Step. H. iii. 137, 1830.

2. Brephos Notha. The Light Orange Underwing.

B. M.

Noctua notha, Hüb. No. t. 74, f. 343, 344, 1802. Noctua Parthenias, Esp. S. iv. 51, t. 85, f. 48, 1786. Brepha Parthenias, Step. H. iii. 136, 1830. West. & H. M. i. 251, t. 56, f. 5, 6, 1843. Brepha Parthenias, var., Goda. L. F. v. 89, 1824.

## Sub-F. XXV. GONIATIDI.

Goniatidi, Step. MSS. Goniatidæ, Dvp. C. 190, 1846.

## 207. EUCLIDIA.

Euclidia, Och. (S. iv. 96, 1816). Treit. S. v. 3, 388, 1826.

a. Drasteria, Hüb. V. 280, 1816.

1. EUCLIDIA GLYPHICA. The Burnet.

B. M.

Phalæna-N. glyphica, *Linn. S. Nat.* i. 510, 1758. Euclidia glyphica, *Step. H.* iii. 138, 1830. *Cur. B. E.* xiv. t. 659, 1837.

b. Callistege, Hüb. V. 281, 1816.

2. EUCLIDIA MI. The Shipton.

B. M.

Phalæna-N. Mi, Linn. F. ii. No. 1162, 1761. Euclidia Mi, Step. H. iii. 139, 1830. West. & H. M. i. 252, t. 56, f. 11, 12, 1843. Phalæna-N. graminis, Hüfn.—(Berl. M. iii. 412, 1769).

Var. a. Noctua litterata, Cyr. E. N. i. t. 1, f. 9, 1787.

# Sub-Div. III. LEPIDOPTERA SEMIDIURNA.

Lepidoptera semidiurna, Step. H. iii. 140, 1831.

Fam. I. GEOMETRIDÆ.

Geometridæ, Step. H. iii. 141, 1831.

Sub-Fam. I. DASYDIADI.

Dasydiadi, Step. MSS.

208. PSODOS.

Psodos, Treit. S. vi. 1, 254, 1827. Spodos, Sodoff.—(Bull. S. I. Mosc. 17, 1837). Parascotia, p., Hüb. V. 314, 1816.

1. Psodos trepidaria. The Black Mountain Moth. B. M

Geometra trepidaria, Hüb. G. t. 66, f. 343, 1809? Psodos trepidaria, Step. H. iii. 144, 1831. Wood, I. E. t. 18 f. 449.

#### 209. DASYDIA.

Dasydia, Guén.—Dup. C. 281, 1846. Orphne, p., Hüb. V. 314, 1816.

1. DASYDIA TORVARIA.* The Large Black Mountain Moth.

Geometra torvaria, Hüb. G. t. 71, f. 366, 367, 1806. Geometra tenebraria, Esp. S. v. t. 51, Geo. f. 6, 1796. West. & H. M. ii. 67, Note, 1843).

Sub-F. 11. FIDONIDI.

Fidonidi, Guén. MSS.

210. SPERANZA.

Speranza, Cur. B. E. v. fo. 225, 1828.

## a. Isturgia, Hüb. V. 297, 1816.

1. SPEBANZA LIMBARIA. The Frosted Yellow.

B. M.

Phalæna limbaria, Fab. S. E. 624, 1775.
Speranza limbaria, Step. H. iii. 145, 1831. Wood, I. E. t. 18, f. 452.
Geometra conspicuata, Schiff. (W. V. 316, 1776).
Geometra auroraria (conspicuata), Hüb. Beit. 127, f. 4, f. Y,

1787.

Phalæna-G. circumdata, Vill. E. ii. 330, t. 6, f. 10, 1789.

b. Perconia. Hüb. V. 296, 1816.

Eupisteria, Dup. C. 241, 1846.

2. SPERANZA BRUNNEATA. The Rannoch Looper.

B. M.

Geometra brunneata, Thunb. I. S. 9, 1784. Speranza brunneata, Step. H. iii. 145, 1830. Speranza sylvaria, Cur. B. E. v. t. 225, 1828. Episteria quinquaria, Doub. (List 14, 1847).

3. Geometra quinquaria, Hüb. ? Ge. t. 100, f. 516, 1816. Q. Geometra Pinetaria, Hüb. ? Ge. t. 24, f. 130, 1797. Var. ? a. Phalæna atomata, Fab. ? E. S. iv. 2, 190, 1794. Var. ? b. Phalæna flammata, Fab. ? E. S. iii. 2, 194, 1794.

# 211. EUPISTERIA.

Eupisteria, Bois. I. M. 2 ed. 192, 1840.

Eupisteria carbonaria. The Netted Mountain Moth. B. M. Phalæna-G. carbonaria, Linn. F. No. 1246, 1761. Geometra picearia, Hüb. Ge. t. 106, f. 552—555, 1822.
 Var. a.? Geometra rosceidaria, Hüb. Ge. t. 64, f. 332, 1802.

#### 212. FIDONIA.

Fidonia, Treit. S. vi. 1, 262, 1827. Phytonia, Sodoff.—(Bull. S. I. Mosc. 17, 1837).

## a. FIDONIA.

1. FIDONIA ATOMARIA. The Common Heath. B. M. Phalæna-G. atomaria, Linn. S. Nat. i. 521, 1758.

Fidonia atomaria, Step. H. iii. 148, 1831. Wood, t. 18, f. 454, 455.

Phalæna-G. Aceraria, Hüfn.—(Berl. M. iv. 520, 1770).

&. Phalæna pennata, Scop. C. No. 569, 1763.

Q. Phalæna Isocelata, Scop. C. No. 558, 1763.

Var. a. Geometra glarearia, Haw. L. B. 280, 1810.

Var. b. Geometra rosceidaria, Haw. L. B. 280, 1810.

Var. c. Geometra carbonaria, Haw. L. B. 280, 1810.

## b. Selidosema, Hüb. V. 299, 1816.

2. FIDONIA PLUMARIA. The Bordered Gray.

B. M.

Geometra plumaria, Schiff. (W. V. 106, 1776).

Fidonia plumaria, Wood, I. E. t. 18, f. 457.

Phalæna roraria, Fab. M. ii. 189, 1787.

Phalæna-G. ericetaria, Vill. E. ii. 329, t. 6, f. 9, 1789.

Fidonia ericetaria, Step. H. iii. 149, 1831.

Geometra Vespertaria, Esp. S. v. (180), t. 32, f. 1, 1795—97. Q. Geometra subfimbriata, Haw.—Ent. Tr. i. 136, 1812.

Var a. Geometra limbata,* Ramb.—Ann. S. Ph. (teste Bois. C. 191, 1840), Q.

#### 213. HALIA.

Halia, Dup. L. F. viii. 107, 1829. Grammatophora, Step. (Cat. ii. 126, 1829). Itame, p., Hüb. V. 299, 1816.

1. HALIA WAUARIA. The V. Moth.

B. M.

Phalæna-G. Wauaria, *Linn. S. Nat.* i. 522, 1758. Phalæna Vauaria, *Don. B. I.* vi. 37, t. 196, 1797.

Halia Vauaria, Step. H. iii. 194, 1831.

Phalæna-G. Viduaria, Müll. F. F. 49, 1764.

Phalæna-G. Vavaria, Hüfn.—(Berl. M. iv. 508, 1770).

Phalæna Vauaria, Schr. F. B. ii. 2, 24, 1802.

Var. a. Geometra Vau-nigraria, Hatchett.—Ent. Tr. i. 244, t. 7, f. 3, 1812.

#### 214. BUPALUS.

Bupalus, Leach, E. E. ix. 135, 1815.

• Catograpta, Hub. V. 297, 1816.

1. BUPALUS PINIARIUS. The Bordered White.

B. M.

Phalæna-G. Piniaria, *Linn. S. Nat.* i. 520, 1758. Phalæna Piniaria, *Don. B. I.* x. 27, t. 336, 1801. Bupalus Piniarius, *Step. H.* iii. 147, 1831. Phalæna-G. Tiliaria, *Linn. S. Nat.* i. 520, 1758.

#### 215. MÆSIA.

Mæsia, Step. H. iii. 150, 1831. Psednothrix, p., Hüb. V. 319, 1816. Scodiona, Bois. I. M. 2 ed. 185, 1840.

Mæsia favillacearia, Hüb. G. t. 26, f. 139, 1797.
 Bupalus favillacearia, Hüb. G. t. 26, f. 139, 1824.
 Mæsia favillacearia, Step. H. iii. 150, 1831.
 Phalæna mediopunctaria, Don. B. I. xiii. 59, t. 461, f. 1, 2, 1808.

Var. a. Geometra Belgiaria, Hüb. G. t. 26, f. 140, 1797.

# Sub-F. III. HIBERNIDI.

Hibernidi, Guén. MSS.

## 216. ALSOPHILA.

Alsophila, Hüb. V. 320, 1816. Anisopteryx, p., Step. H. iii. 151, 1831. Anisopteryx, Bois. I. M. 2 ed. 193, 1840.

1. Alsophila Æscularia. The March Moth.

B. M.

Geometra Æscularia, Schiff. (W. V. 101, 1776).

Anisopteryx Æscularia, Step. H. iii. 152, 1831. Wood, I. E. t. 18, I. 460a, S, I. 461a, S.

Geometra murinaria, Esp. S. v. (198), t. 35, I. 5, 6, 1795—97.
Geometra cineraria, Marsh. MSS.—Haw. (Pr. 23, 1802).

Q?. Geometra apteraria, Haw. P L. B. 306, 1810.

#### 217. ANISOPTERYX.

Anisopteryx, Step. (Cat. ii. 116, 1829). Id. H. iii. 151, 1831. Agriopis, p., Hüb. V. 320, 1816.

1. ANISOPTERYX LEUCOPHEARIA. The Spring Usher.

B. M.

Geometra leucophearia, Schiff. (W. V. 101, 1776).

Anisopteryx leucophearia, Step. H. iii. 151, 1831. Wood. I. E. t. 18, f. 459a, 3; f. 460n, Q.

Geometra marmorinaria, Esp. S. v. (205), t. 37, f. 1, 2, 1795

Var. a. Geometra nigricaria, Hüb. G. t. 35, f. 181, 1798. Var. ? b. Geometra sorditaria, Hüb. G. t. 64, f. 334, 1802 ?

## 218. ERANNIS.

Erannis, Hüb. V. 320, 1816. Hyberoia, Latr. (F. N. 479, 1825). Lampetia, Step. (Cat. ii. 116, 1829). Hiberuia, Dap. L. F. viii. 106, 1829.

1. ERANNIS PROGEMMARIA. The Dotted Border.

B. M.

Geometra progemmaria, Hüb. G. t. 35, f. 183, 1798. Geometra capreolaria, Esp. S. v. 203, t. 36, f. 8, 9, 1795. Hybernia capreolaria, Step. H. iii. 153, 1831. Wood, I. E. t. 18, f. 461a, ♂; f. 459n, ♀.

Var.? a. Phalæna diversaria, Fab. P. E. S. iii. 2, 157, 1794.
Geometra stictaria, Marsh. MSS.—Haw. (Pr. 21, 1802).
Var. b. Geometra connectaria, Haw. L. B. 285, 1810. Step. H. iii. 152, 1831.

2. Geometra luctuaria, Haw. L. B. 279, 1810.

2. ERANNIS AURANTIARIA. The Scarce Umber.

B. M.

Geometra aurantiaria, Hilb. G. t. 35, f. 184, 1798. Geometra mellearia, Beck. & S. F. I. iii. 676, 1805. Geometra prosapiaria, Haw. L. B. 285, 1810.

Hybernia prosapiaria, Step. H. iii. 152, 1831. Wood. I. E. t. 18, f. 463, f. .
Var. a. Phalwna-G. testaccaria, Vill. E. ii. 321, t. 6, f. 5, 1789.

3. Erannis defoliaria. The Mottled Umber. B. M.

Phalwna-G. defoliaria, *Linn. F.* ii. No. 1238, 1761.

Hybernia detoliaria, *Step. H.* iii. 153, 1831. *Cur. B. E.* xv. t. 703, 1838.

Phalwna-G. pulveraria, *Hüfn.*—(*Berl. M.* iv. 518, 1770).

## Sub-F. IV. BISTONIDI.

Bistonidi, Step. MSS.

#### 219. PHIGALIA.

Phigalia, Dup. E. F. viii. 106, 1829. Apochima, p., Hüb. V. 319, 1816. Amphidasis, p., Step. (Cat. ii. 117, 1829). Amphidasys, Sodoff.—(Bull. S. I. Mosc. 17, 1837).

1. PHIGALIA PILOSABIA. The Pale Brindled Beauty.

B. M.

Geometra pilosaria, Schiff. (W. V. 100, 1776).

Phigalia pilosaria, Step. H. iii. 156, 1831. Wood. I. E. t. 18, f. 465a, &; f. 465n, Q.

Phalæna pedaria, Fab. E. S. iii. 2, 148, 1794.

Geometra plumaria, Esp. S. v. (195), t. 35, f. 1, 2, 1795—97.

3. Phalæna-G. hyemaria, Bork. E. S. v. 193, 1764.

## 220. NYSSIA.

Nyssia, Dup. L. F. viii. 106, 1829. Apocheima, p., Hüb. V. 319, 1816. Amphidasis, p., Step. (Cat. ii. 117, 1829).

# a. Nyssia, Dup. ut supra.

1. Nyssia hispidaria. The Small Brindled Beauty.

B. M.

Geometra hispidaria, Schiff. (W. V. 99, 1776). Nyssia hispidaria, Step. H. iii. 156, 1831. Phalæna Ursularia, Don. B. I. xiii. 31, t. 447, 1808.

Var. a. Nyssia Tauaria, Newm.—Ent. Mag. i. 413, 1833.

# b. Ithysia, Hüb. V. 319, 1816.

2. NYSSIA ZONARIA. The Belted Beauty.

B. M.

Geometra Zonaria, Schiff. (W. V. 100, 1776). Nyssia Zonaria, Step. H. iv. 391, 1835. Cur. B. E. xiii. t. 615, 1836.

Phalæna Zona, Fab. M. ii. 131, 1787.

§ Nyssia Zonaria,* Wing.—Tr. Ent. Soc. v. 121, t. 14. f. 9, 1849, herm.

#### 221. BISTON.

Biston, Leach, E. E. ix. 134, 1815. Amphidasis, Dup. L. Fr. viii. 106, 1829.

#### a. Lycia, Hüb. V. 319, 1816.

1. BISTON HIRTARIUS. The Brindled Beauty.

B. M.

Phalæna-G. hirtaria, Linn. F. ii. No. 1236, 1761. Biston hirtarius, Step. H. iii. 159, 1831. West. & H. M. ii. 10, t. 58, f. 14, 15, 1843. Phalæna. G. atomaria, Hüfn .- (Berl. M. iv. 510, 1770).

Geometra prodromaria, Lang. V. 177, 1782.

Var. a. Phalæna-G. contiguaria, Bork. E. S. v. 187, 1794. Geometra congeneraria, Hüb. Ge. t. 33, f. 174, 1797. Var. b. Geometra fumaria, *Haw. L. B.* 273, 1810.

## b. Eubyja, Hüb. V. 318, 1816.

2. Biston Betularius. The Peppered Moth.

B. M.

Phalæna-G. Betularia, Linn. S. Nat. i. 521, 1758. Biston Betularius, Step. H. iii. 159, 1831. West. & H. M. ii. 9, t. 58, f. 11—13, 1843. Phalæna-G. Ulmaria, Bork. E. S. v. 181, 1794.

3. BISTON PRODROMARIUS. The Oak Beauty.

B. M.

Geometra prodromaria, Schiff. (W. V. 99, 1776). Biston prodromarius, Step. H. iii. 158, 1831. West. & H. M. ii. 9, t. 58, f. 8—10, 1843.

Phalæna-G. strataria, Hufn.—(Berl. M. iv. 514, 1770).

Phalæna marmoraria, Fues. M. i. 216, 1778. Geometra hispidaria, Lang. V. 176, 1782.

8. Biston prodromaria,* Wing.-Tr. Ent. Soc. v. 120, t. 14, f. 8. 1849, herm.

# Sub-F. V. ODOPTERIDI.

Odopteridi, Step. MSS. Ennomidi, Guén, MSS.

#### 222. HIMERA.

Himera, Dup. L. F. viii. 104, 1829. Colotoïs, p., Hüb. V. 288, 1816. Metra, Step. (Cat. ii. 118, 1829).

1. HIMERA PENNARIA. The Feathered Thorn.

B. M.

Phalæna-G. pennaria, *Linn. F.* ii. No. 1231, 1761. Himera pennaria, *Step. H.* iii. 160, 1831. *West. & H. M.* ii. 11, t. 59, f. 1, 2, 1843. Aber. Geometra bifidaria,* *Haw. L. B.* 291, 301, 1810.

# 223. CROCALLIS.

Crocallis, Treit. (S. v. 2, 431, 1826). Id. vi. 151, 1827. Colotoïs, p., Hüb. G. 288, 1816.

CROCALLIS ELINGUARIA. The Scolloped Oak.
 Phalæna-G. elinguaria, Linn. S. Nat. i. 520, 1758.
 Crocallis elinguaria, Step. H. iii. 162, 1831. West. & H. M. ii. 11, t. 59, f. 3, 4, 1843.

#### 224. ODONTOPERA.

Odontopera, Step. H. iii. 162, 1831. Gonodontis, p., Hüb. V. 287, 1816.

Odontopera Bidentata, Linn. F. ii. No. 1255, 1761.
 Odontopera bidentata, Step. H. iii. 163, 1831. West. & H. M. ii. 11, t. 59, f. 5, 6, 1843.
 Phalæna dentaria, Fab. S. E. 623, 1775.
 Geometra obscurata, Schiff. ? (W. V. 104, 1776).

#### 225. ODOPTERA.

Odoptera, Sodoff.—Bull. S. I. Mosc. 16, 1837. Geometra, Leach, E. E. ix. 134, 1815. Ennomos, D., Treit. S. vi. 1, 41, 1827.

# a. Eugonia, Hub. V. 291, 1816.

1. ODOPTERA ALNIARIA. The Large Thorn.

B. M.

Phalæna-G. Alniaria, Linn. S. Nat. i. 519, 1758. Geometra Alniaria, Step. H. iii. 164, 1831. Wood, I. E. t.

58, f. 8, 9, 1839.

2. ODOPTERA TILIARIA. The Canary-shouldered Thorn. B. M.

Phalæna-G. Tiliaria, Bork. E. S. v. 87, 1794.

Geometra Tiliaria, Step. H. iii. 166, 1831. Wood, I. E. t. 18, f. 473, 3.

Geometra Canaria, Hub. Beit. ii. 99, t. 4, f. Y. 1789.

Geometra Alniaria, Haw. L. B. 293, 1810.

Var. a. Geometra Canaria, Step. H. iii. 165, 1831. Wood, I. E. t. 18, f. 474.

3. ODOPTEBA EROSARIA. The September Thorn. B. M.

Geometra erosaria, Schiff. (W. V. 103, 1776). Step. H. iii. 165, 1831. Wood, I. E. t. 18, f. 476, &.

Phalæna crassaria, Fab. E. S. iii. 2, 135, 1794.

Geometra Tiliaria, Esp. S. v. 60, t. x. f. 3-6, 1794.

Var. a. Geometra ochraria, Step. H. iii. 165, 1831. Wood, I. E. t. 18, f. 475.

4. ODOPTERA PUSCANTARIA. The Dusky Thorn. B. M. Geometra fuscantaria, Haw. (Pr. 22, 1802). Step. H. iii. 167, 1831. Wood, I. E. t. 19, f. 485. (Var. præc.?).

5. ODOPTERA ANGULARIA. The August Thorn.

B. M.

Geometra angularia, Schiff. (W. V. 105, 1776). Step. H. iii. 166, 1831. Wood, I. E. t. 107, f. 477, 480. Cur. B. E. xiv. t. 667, 1837.

J. Geometra angularia, Haw. L. B. 294, 1810.

Q. Geometra Alniaria, Don. B. I. viii. 61, t. 275, 1799. Geometra Tiliaria, Haw. L. B. 294, 1810,

Var. a. Phalæna-G. dentaria, Vill. E. ii. 301, 1789.

Var. b. Geometra erosaria, Esp. S. v. 62, t. 11, f. 1, 2, 1794.

Var. c. Geometra Carpiniaria, Hub. G. t. 5, f. 27, 1796. Step. H. iii. 167, 1831. Wood, l. c. f. 480.

Var. d. Geometra Quercinaria, Hub. G. t. 5, f. 24. Step. H. iii. 166, 1831. Wood, l. c. fo. 478.

Var. e. Geometra Quercaria, Hüb. G. t. 80, f. 411, 412? Step. H. iii. 166, 1831.

Var. f. Geometra angularia, Hüb. G. t. 5, f. 22. Step. H. iii. 166, 1831. Wood, l. c. f. 479.

# b. Selenia, Hüb. V. 292, 1816.

6. ODOPTERA LUNARIA. The Lunar Thorn.

B. M.

Phalæna lunaria, Fab. E. S. 623, 1775.

Geometra lunaria, Step. H. iii. 169, 1831. Wood, I. E. t. 19, f. 483.

Geometra lunularia, Hüb. Beit. i. 27, t. 3, f. T, 1789.

Var. a. Geometra delunaria, Hüb. G. t. 7, f. 34, 1796. Step. H. iii. 170, 1831. Wood, I. E. t. 19, f. 484. Var.? b. Geometra sublunaria, Step. H. iii. 170, t. 28, f. 1, 1831.

B. M. 7. Odoptera illustraria. The Purple Thorn.

Geometra illustraria, Hüb. G. t. 7, f. 34, 1796. Step. H. iii. 170, 1831. West. & H. M. ii. 14, t. 59, f. 18, 1843.

Phalæna-G. tetralunaria, Hüfn.—(Berl. M. iv. 506, 1770).

Geometra lunaria, B. quadrilunaria, Esp. S. v. 72, t. 12, f. 5, 6, 1794-5.

Phalæna Phœbaria, Schr. F. B. ii. 2, 13, 1802.

8. Odoptera illunaria. The Early Thorn.

B. M.

Geometra illunaria, Hüb. G. t. 7, f. 36-7, 1796. Step. H. iii. 168, 1831. West. & H. M. ii. 13, t. 59, f. 13, 14, 1843. Geometra lunaria, var. 2-4, Schiff. (W. V. 282, 1776).

Geometra bilunaria, Esp. S. v. (73), t. 13, f. 1-10, 1794-5.

Var. a. Geometra illunaria, Esp. S. v. (76), t. 14, f. 1-5, 1794-5.

Var. b. Phalæna ustularia, Don. B. I. iii. 25, t. 82, 1794.

Var. c. Geometra unilunaria, Esp. S. v. (77), t. 14, f. 6-8, 1794

Var. d. Geometra fulvolunaria, Esp. S. v. (78), t. 14, f. 9, 10,

Var. e. Geometra Juliaria, Haw. L. B. 293, 1810. Step. H. iii. 169, 1831. Wood, I. E. t. 19, f. 482, 1834.

Geometra illunaria, var. Æstivalis, Dup. L. F. viii. 157, t. 144, f. 3, 1829.

## 226. PERICALLIA.

Pericallia, Step. (Cat. ii. 120, 1829). Id. H. iii. 171, 1631. Hygochroa, p., Hüb. V. 293, 1816.

Pericallia Syringaria, Linn. S. Nat. i. 520, 1758.
 Pericallia Syringaria, Step. H. ii. 171, 1831. West. & H. M. ii. 15, t. 59, f. 21, t. 60, f. 29, 1843.

Var.? a. Geometra circularia, Thunb. I. S. 58, t. 4, f. 6, 1792.

# 227. ANGERONA.

Angerona, p., Dup. L. F. viii. 104, 1829. Crocota, Hüb. V. 295, 1816.

I. ANGERONA PRUNARIA. The Orange Moth.

B. M.

Phalæna-G. Prunaria, Linn. S. Nat. i. 520, 1758.

Angerona Prunaria, Step. H. iii. 172, 1831. West. & H. M. ii. 15, t. 59, f. 22—25, 1843.

Phalæna corticalis, Scop. C. 216, 1734.

Phalana-G. fulvaria, Hufn. ?- (Berl. M. iv. 518, 1770).

Phalæna atomaria, Goetz. B. iii. 292, 1779. Q. Phalæna dimidiata, Fab. S. E. 630, 1775, var. Q. Var. a. Geometra Corylaria, Thunb. I. S. 4, 1784.

Phalama sordidata, Goetz. B. iii. 342, 1779.
Phalama Prunaria, var., Dan. B. I. ix. 13, t. 293, f. 3, 1800.

# Augerona Prunaria,* herm. Dunc. E. M. 216, t. 27, f. 1, 1841. 228. OPISTOGRAPTIS.

Opistograptis, Hüb. V. 292, 1816. Rumia, Dup. L. F. viii. 103, 1829.

Opistograptis Cratægata. The Brimstone Moth. B. M. Phalæna-G. Cratægata, Linn. F. ii. No. 1283, 1761.
 Rumia Cratægata, Step. H. iii. 174, 1831. West. & H. M. ii. 15, t. 59, f. 26—28, 1843.
 Phalæna-G. luteolata, Linn. S. Nat. i. 525, 1758.

# 229. OURAPTERYX.

Ourapteryx, Leach, E. E. ix. 134, 1815.

Therinia, p., Hüb. V. 290, 1816. Acæna, Treit. S. vi. 1, 84, 1827. Urapteryx, Kirby & Sp. I. iv. Index, 1832?

 OURAPTERYX SAMBUCARIA. The Swallow-tailed Moth. B. M. Phalæna-G. Sambucaria, Linn. S. Nat. i. 519, 1758. Ourapteryx Sambucaria, Step. H. iii. 175, 1831. Cur. B. E. xi. t. 508, 1834.

#### 230. EUDALIMIA.

Eudalimia, Hüb. V. 286, 1816, 9. Phalæna, Leach, E. E. ix. 134, 1815. Campæa, p., Lam. A. s. V. iii. 169, 1816, 8. Metrocampa, Latr. (F. N. 477, 1825).

EUDALIMIA MARGARITARIA. The Light Emerald.
 Phalæna-G. margaritaria, Linn. F. ii. No. 1249, 1761.
 Campæa margaritaria, Step. H. iii. 176, 1831. West. & H. M. ii. 16, t. 59, f. 32; t. 60, f. 42, 1843.
 Phalæna-G. vernaria, Hüfn.—(Berl. M. iv. 506, 1770).
 Bombyx sesquistriataria, Esp. S. iii. 368, t. 72, f. 1, 2, 1785.
 Phalæna vitriolata, Cyr. E. N. t. iv. f. 4, 1787.
 Phalæna-G. bupleuraria, Vill. E. iv. 495, 1789.
 Phalæna-G. sesquistriaria, Bork. E. S. iv. 454, 1789.
 Phalæna-G. prosapiaria, Linn. F. ii. No. 1252, 1761.

#### 231. ELLOPIA.

Ellopia, Treit. (S. v. 2, 429, 1825). Id. vi. 1, 89, 1827. Therina, p., Hib. V. 283, 1816.

1. ELLOPIA FASCIARIA. The Barred Red. B. M. Phalæna-G. fasciaria, Linn. S. Nat. i. 521, 1758. Ellopia fasciaria, Step. H. iii. 177, 1831. West. & H. M. ii.

16, t. 59, f. 33, 1843. Phalæna-G. Neustriaria, Hüfn.—(Berl. M. iv. 520, 1770). Var.? a. Geometra prasinaria,* Hüb. Ge. t. 1, f. 4, 1796.

## Sub-F. VI. GEOMETRIDI.

Geometridi, Guén. MSS. Chlorochromites, Dup. C. 223, 1846.

## 232. GEOMETRA.

Geometra, Linn. S. Nat. ii, 1767, Hipparchus, Leach, E. E. ix. 134, 1815. Holothalassis, Hüb. V. 285, 1816.

1. GEOMETRA PAPILIONARIA. The Large Emerald.

B. M.

Phalema-G. Papilionaria, Linn. S. Nat. i. 522, 1758. Hipparchus Papilionaria, Step. H. iii. 178, 1831. West. & H. M. ii. 17, t. 60, f. 1, 2, 1843.

#### 233. JODIS.

Jodis, Hüb. V. 286, 1816. Hemithea, p., Dup. L. F. viii. 106, 1829. Chlorochroma, A., Dup. C. 224, 1846.

I. Jodis VERNARIA. The Small Emerald.

B. M.

Phalwua-G. vernaria, Linn. F. ii. No. 1227, 1761.

Hemithea vernaria, Step. H. iii. 179, 1831. West. & H. M. ii. 17, t. 60, f. 3, 4, 1843

Phalwna-G. Volntata, Vill. E. ii. 373, 1789.

Geometra chrysoprasaria, Esp. S. v. 37, t. 5, f. 1—4, 1794.

Phalwna-G. Æraginaria, Bork. E. S. v. 43, 1794.

Phalwna lucidata, Don. B. I. iii. 67, t. 97, 1795.

## 234. PSEUDOTERPNA.

Pseudoterpna, Hüb. V. 284, 1816. Hemithea, Dup. C. 225, 1846.

1. PSEUDOTERPNA CYTHISARIA. The Grass Emerald. B. M.

Geometra Cythisaria, Schiff. (W. V. 97, 1776).

Hemithea Cythisaria, Step. H. iii. 180, 1831. West. & H. M. ii. 18, t. 60, f. 6, 7, 1843.

Phalama-G. Pruniata, Hüfn.—(Berl. M. iv. 625, 1770).

Phalama prasinaria, Fab. S. E. 626, 1775. Phalama-G. Genistaria, Vill. E. ii. 328, 1789.

Var. a. Hemithea Coronillaria, Dup. L. F. viii. 255, t. 152, f. 3, \$, 1829.

Var. b. Hemithea Agrestaria, Dup. L. F. viii. 257, t. 152, f. 4, Q, 1829.

## 235. EUCHLORIS.

Euchloris, Hüb. V. 283, 1816. Phorodesma, p., Bois. I. M. 2 ed. 179, 1840.

1. EUCHLORIS SMARAGDARIA. The Essex Emerald. B. M.
Phalæna Smaragdaria, Fab. M. I. ii. 192, 1787.
Geometra Smaragdaria, Esp. S. v. 38, t. 5, f. 5—7, 1794.
Hipparchus Smaragdarius, Cur. B. E. vii. t. 300, 1830.
Hemithea Smaragdaria, Step. H. iii. 179, 1831.

#### 236 COMIBÆNA.

Comibæna, Hüb. V. 284, 1816. Phorodesma, p., Bois. I. M. 2 ed. 179, 1840.

COMIBENA BAJULARIA The Blotched Emerald. B. M. Geometra bajularia, Schiff. (W. V. 97, 1776).
 Cleora bajularia, Step. H. iii. 181, 1831. West. & H. M. ii. 18, t. 60, f. 8, 9, 1843.
 Phalæna-G. pustulata, Hüfn.—(Berl. M. iv. 520, 1770).
 Phalæna ditaria, Fab. G. M. 286, 1777.

# Sub-F. VII. CLEORIDI.

Cleoridi, Step. MSS.

#### 237. CLEORA.

Cleora, Cur. B. E. ii. fo. 88, 1825.

a. Synopsia, Hüb. V. 317, 1816.

1. CLEORA LICHENARIA. The Brussels' Lace. B. M. Geometra Lichenaria, Schiff. (W. V. 100, 1776). Cleora Lichenaria, Step. H. iii. 181, 1831. West. & H. M. ii. 18, t. 60, f. 10, 11, 1843.

Var. a. Phalæna-G. cineraria, Bork. E. S. v. 165, 1794.

2. CLEORA VIDUARIA. The Speckled Beauty.

Geometra viduaria, Schiff. (W. V. 101, 1776). Cleora viduaria, Step. H. iii. 182, t. 30, f. 2, 1831. Geometra angularia, Thunb. I. S. 59, t. 4, f. 9, Q, 1792. c. Boarmia, t., Treit. (S. v. 2, 433, 182)

4. CLEOBA CINCTARIA. The Ringed Carpet.

Geometra cinctaria, Schiff. (W. V. 101, 1776). Cleora cinctaria, Cur. B. E. ii. t. 88, 1825. S. 1831.

Phaluna-G. pascuaria, Brahm, I. K. ii. 120, 17

# 238. PARASCOTIA.

Parascotia, Hiib. V. 314, 1816. Boletobia (Genus Dipt.) Bois. I. M. 2 ed. 201,

PARASCOTIA FULIGINARIA. The Waved Black.
 Phalæna-G. fuliginaria, Linn. F. ii. No. 1247, 1
 Fidonia fuliginaria, Step. H. iii. 149, 1831, ii. 5, t. 57, f. 11, 12, 1843.
 Geometra carbonaria, Schiff. (W. V. 108, 1776)

Q. Phalæna lunulata, * Fab. M. I. ii. 207, 1787.

#### 239. TEPHRONIA.

Tephronia, Hüb. V. 318, 1816. Muiophila (Genus Coleopt.) Bois. I. M. 2 ed. 20

1. TEPHRONIA CORTICARIA.* The Dusky Carpet.

Geometra corticaria, Schiff. (W. V. 100, 1776) 32, f. 167, f., 1797.

Boarmia corticaria, Dup. L. F. viii. 388, t. 18

#### 240. ALCIS.

Alcis, Cur. B. E. iii. fo. 113, 1825. Boarmia, p., Treit. (S. v. 2, 433, 1825). Boarmia, Bois. I. M. 2 ed. 196, 1840.

## a. DRYOCÆTIS, t., Hüb. V. 316, 1816.

## 1. ALCIS ROBORARIA. The Greak Oak Beauty.

B. M.

Geometra Roboraria, Schiff. (W. V. 101, 1776). Alcis Roboraria, Step. H. iii. 187, 1831. West. & H. M. ii. 20, t. 60, f. 23, 24, 1843. Phalæna-G. leucophearia, Vill. E. ii. 323, 1789.

Geometra grandaria, Haw. (Pr. 20, 1802). Var. a. Geometra piperitaria, Haw. MSS., var. minor.

## 2. Alois consortaria. The Pale Oak Beauty.

B. M.

Phalæna consortaria, Fab. M. I. ii. 187, 1787. Alcis consortaria, Step. H. iii. 186, 1831. West. & H. M. ii. 21, t. 60, f. 28, 29, 1843. Phalæna-G. consobrinaria, Bork. E. S. v. 152, 1794.

# b. Deileptenia, Hüb. V. 316, 1816.

# 3. Alcis Abietaria. The Satin Carpet.

B. M.

Geometra Abietaria, Schiff. (W. V. 101, 1776). Geometra gemmaria Abietis, Esp. S. v. 217, t. 39, f. 1-6, 1795-98.

Alcis sericearia, Cur. B. E. iii. t. 113, 1825. Step. H. iii. 186, 1831.

# 4. ALCIS REPANDATA. The Mottled Beauty.

B. M.

Phalæna-G. repandata, Linn. S. Nat. i. 524, 1758. Alcis repandata, Step. H. iii. 184, 1831.

Alcis repandaria, West. & H. M. ii. 19, t. 60, f. 16-20, 1843.

Var. a. Geometra destrigaria, Haw. L. B. 275, 1810. Alcis destrigaria, Step. H. iii. 185, 1831. Wood, I. E. t. 19. f. 505.

Var. b. Geometra conversaria, Hüb. Ge. t. 62, f. 321, 1801. S. iii. 185, var. Hatchett.—Ent. Tr. i. 328, t. 9, f. 2, 1812. Alcis conversaria, Step. H. iii. 185, 1831.

Var. c. Alcis muraria, Cur. B. E. iii. fo. 113, 1825. Step. H. iii. 185, 1831. Wood, I. E. t. 19, f. 506.

Var. e. Alcis subcærulearia, Step. MSS., Cat. & B. 3118, 1850.

5. ALCIS RHOMBOIDARIA. The Willow Beauty.

B. M.

B. M.

Geometra rhomboidaria, Schiff. (W. V. 101, 1776).

Aleis rhomboidaria, Step. H. iii. 187, 1831. West. & H. M. ii. 20, t. 60, f. 25-27, 1843.

Phalæna-G. Řibearia, *Linn.* ? *F.* ii. No. 1239, 1761. Phalæna-G. gemmaria, *Brahm. I. K.* ii. 255, 1791.

Var. a. Geometra consobrinaria, Haw. L. B. 276, 1810,

Aleis consobrinaria, Step. H. iii. 188, 1831. Wood, I. E. t. 20, f. 512.

Var. b. Aleis australaria, Cur. B. E. iii. fo. 113, 1825,

Var. c. Geometra Devoniaria, Haw. MSS.

Var. d. Alcis fimbriaria, Step. H. iii. 188, t, 30, f. 1, 1831.

# 241. HEMEROPHILA.

Hemerophila, Step. (Cat. ii. 125, 1829). Id. H. iii. 189, 1831. Synopsia, p., Hüb. V. 317, 1816.

Hemerophila abruptaria. The Waved Umber.
 Geometra abruptaria, Thunb. I. S. 59, t. 4, f. 8, 1792.
 Hemerophila abruptaria, Step. H. iii. 189, 1831.
 Phalama suberaria, Don. B. I. 91, t. 251, f. 1, 1798.
 Geometra petrificata, Hüb. Ge. t. 52, f. 267, 1799.

#### 242. BOARMIA.

Boarmia, Step. H. iii. 190, 1831. Tephrosia, Bois. I. M. 2 ed. 198, 1840.

a. Deileptenia, p., Hüb. V. 316, 1816.

1. BOARMIA EXTERSARIA. The Brindled White-spot. B. M. Geometra extersaria, Hüb. Ge. t. 30, f. 159, 1797. Boarmia extersaria, Step. H. iii. 192, 1831. Tephrosia extersaria, West. & H. M. ii. 23, t. 61, f. 6, 1843.

# b. Ectropis, Hüb. V. 316, 1816.

2. BOARMIA CONSONARIA. The Square Spot.

B. M.

Geometra consonaria, Hiib. Ge. t. 30, f. 157, 1797. Geometra tetragonaria, Haw. MSS.

Boarmia tetragonaria, Cur. B. E. vi. t. 280, 1829. Step. H. iii, 190, 1831.

Var. a. Boarmia trigonaria, Step. (Cat. ii. No. 6504, 1829).

3. BOARMIA CREPUSCULARIA. The Small Engrailed.

B. M.

Geometra crepuscularia, Schiff. (W. V. 101, 1776). Boarmia crepuscularia, Step. H. iii. 191, 1831.

Tephrosia crepuscularia, West. & H. M. ii. 22, t. 61, f. 4, 5, 1843.

Geometra similaria, Hifn.—(Berl. M. iv. 512, 1770). Phalæna-G. bistortata, Goetz. B. iii. 438, 1779.

Phalæna-G. biundularia, Vill. E. ii. 337, 1789.

Var. a. Geometra consonaria, Haw. L. B. 277, 1810.

Boarmia consonaria, Step. H. iii. 192, 1831. Wood, I. E. t. 20, f. 518.

Var. b. Boarmia strigularia, Step. H. iii. 192, 1831. Wood, I. E. t. 20, f. 519.

4. BOARMIA LABICARIA. The Engrailed.

B. M.

Boarmia Laricaria, *Doub.* (*List*, 15, 1848). Geometra biundularia, *Esp. S.* v. 222, t. 40, f. 3, 1795—98.

Geometra Abietaria? Haw. L. B. 276, 1810. Boarmia Abietaria, Step. H. iii. 191, 1831.

Tephrosia Abietaria, West. & H. M. ii. 22, t. 61, f. 3, t. 60, f. 22, 1843.

c. Selidosema, Hüb. V. 299, 1816.

5. BOARMIA PUNCTULARIA. The Gray Birch.

B. M.

Geometra punctularia, Schiff. (W. V. 106, 1776). Boarmia punctularia, Step. H. iii. 103, 1831. Wood, I. E. t. 20, f. 521.

Geometra tigris, Walsh.—Naturf. xiii. 31, t. 3, f. a, b, 1793. Var.? a. Geometra punctulata, Hüb. Ge. t. 105, f. 545, 1813.

# Sub-F. IX. GNOPHIDI.

Gnophidi, Guén. MSS. Gnophites, Dup. C. 226, 1846.

## 243. CHARISSA.

Charissa, Cur. B. E. iii. fo. 105, 1826. Catascia, p., Hüb. V. 313, 1816. Elophos, †† Bois. I. M. 2 ed. 199, 1840. 1. CHARIBSA OBFUSCATA. The Scotch Annulet.

B. M.

Geometra obluscata, Schiff. (W. V. 108, 1776). Hub. Ge. t 27, f. 142, 1798.

Charissa operaria, Cur. B. E. iii. t. 105, 1826. Step. H. iii 267, 1831.

## 244. GNOPHOS.

Gnophos, Treit. (S. v. 2, 432, 1825). Id. vi. 1, 160, 1827. Scotopteryx, p., Hüb. V. 313, 1816.

1. GNOPHOS PULLATA. The Brown Annulet.

B.M.

Geometra pullata, Schiff. (W. V. 108, 1776).

Charissa pullata, Step. H. iii. 267, 1831.

Geometra dilucidaria, Esp. ? S. v. t. 49. f. 3, 1796. Phalæna 4-pustularia, Don. B. I. xiii. 63, t. 463, 1808.

Var. a. Geometra serotinaria, Haw. L. B. 311, 1810.

Charissa serotinaria, Step. H. iii, 267, 1831. Wood, L. E. t. 23, f. 629,

2. GNOPHOS OBSCURATA. The Dark Annulet.

B, 1

Geometra obscurata, Schiff. (W. V. 108, 1776). Charissa obscurata, Step. H. iii. 266, 1831.

Charissa obscuraria, West. & H. M. ii. 52, t. 67, f. 6, 7, 1843

Geometra lividata, Fab. M. J. ii. 199, 1787.

Geometra carbonaria, Esp. S. v. t. 25, f. 3, 7, 1795.

Geometra anthracinaria, Esp. S. v. 127, 1796.

Var. a. Charissa dilucidaria, Step. H. iii. 267, 1831. Wood, J. Et. 23, f. 627.

# Sub-F. X. CABERIDI.

Caberidi, Guén. MSS. Caberites, Dup. C. 268, 1846.

# 245. ANAGOGE.

Anagoge, Hüb. V. 294, 1816. Azinephora, Step. (Cat. ii. 126, 1829). Numeria, Dup. L. F. viii. 107, 1829 1. ANAGOGE PULVERABIA. The Barred Umber.

B. M.

Phalæna-G. pulveraria, Linn. S. Nat. i. 521, 1758. Numeria pulveraria, Step. H. iii. 195, 1831. West & H. M. ii. 24, t. 61, f. 11, 12, 1843.

#### 246. CABERA.

Cabera, Treit. (S. v. 2, 437, 1825). Id. vi. 1, 343, 1827. Deilinia, Hub. V. 310, 1816. Cabira, Sodoff.—(Bull. S. I. Mosc. 17, 1837).

- CABERA PUSARIA. The Common White Wave.
   Phalæna-G. pusaria, Linn. S. Nat. i. 522, 1758.
   Cabera pusaria, Step. H. iii. 196, 1831. West. & H. M. ii. 24, t. 61, f. 13, 14, 1843.
   Phalæna strigata, Scop. C. No. 541, 1763.
- CABERA ROTUNDARIA. The Round-winged Wave.
   Geometra rotundaria, Haw. L. B. 289, 1810.
   Cabera rotundaria, Step. H. iii. 196, 1831. Wood, I. E. t. 20, f. 525.
   Geometra confinaria, Frey. B. i. 115, t. 60, f. 2, 1833.
- 3. Cabera exanthemata. The Common Wave. B. M. Geometra exanthemata, Scop. C. No. No. 542, 1763.

Cabera exanthemata, Step. H. iii. 197, 1831. Wood, I. E. t. 20, f. 526.

Geometra striaria, Hüb. Ge. t. 17, f. 87, 1796.

Var. a. Geometra arenosaria, Haw. L. B. 289, 1810.
Var. b. Geometra approximata, Haw. (Pr. 23, 1802). Id. L. B. 289, 1810.

#### 247. ALEUCIS.

Aleucis, Guén. MSS. Cleora? Step. (Cat. ii. 123, 1829). Cidaria, Cur. B. E. x. fo. 447, 1833.

1. ALEUCIS PICTARIA. The Gray Carpet.

Geometra pictaria, Thunb. ? I. S. 6, t. 1, f. 5, \$? 1784.
Cleora? pictaria? Step. H. iii. 183, 1831.
Cidaria pictaria, Cur. B. E. x. t. 447, 1833.

## 248. EPHYRA.

Ephyra, Dup. L. F. viii. 108, 1829. Cyclophora, Step. (Cat. ii. 127, 1829).

a. LEUCOPHTHALMIA, Hub. V. 302, 1816.

1. EPHYRA OMICRONARIA. The Mocha.

B. M.

Geometra omicronaria, Schiff. (W. V. 107, 1776).

Ephyra omicronaria, Step. H. iii. 198, 1831. Wood, I. E. t. 20, f. 527.

Geometra annulata, Fab. Sp. I. ii. 249, 1781.

2. EPHYRA ORBICULARIA. The Dingy Mocha.

B. M.

Geometra orbicularia, Hüb. Ge. t. 12, f. 60, 1796. Ephyra orbicularia, Step. H. iii. 198, 1831. Wood, I. E. t. 20, f. 529.

b. Codonia, Hab. V. 302, 1816.

3. EPHYRA PENDULARIA. The Birch Mocha.

B. M.

Phalana-G. pendularia, Linn. F. ii. No. 1244, 1761. Ephyra pendularia, Step. H. iii. 199, 1831. Wood, I. B. t. 20, f. 528.

Phalsena-G. albipunctata, Hüfn.—(Berl. M. iv. 526, 1770). Phalsena-G. pupillaria, Brahm. I. K. ii. 385, 1791. Var. a. Geometra circularia, Fab. E. S. Sup. 451, 1798.

4. EPHYRA PORATA. The False Mocha.

B. M.

Phalæna-G. porata, Linn. S. Nat. ii. 866, 1767. Ephyra porata, Step. H. iii. 200, 1831. Wood, I. E. t. 20, f. 530.

Geometra punctaria, Schiff. (W. V. 107, 1776). Geometra Hübneraria, Haw. (Pr. 24, 1802). Geometra ocellaria, Haw. L. B. 312, 1810.

5. EPHYRA PUNCTARIA. The Maiden's Blush.

B. M.

Phalmua-G. punctaria, Linn. S. Nat. i. 522, 1758. Ephyra punctaria, Step. H. iii. 201, 1831. Wood, I. B. t. 20, f. 531.

Phalana-G. fultraria, Vill. ? E. ii. 330, 1789.

Phalma communifasciata, Don. B. I. ziii. 49, t. 456, 1808. Var. a. Geometra subangularia, Haw. L. B. 313, 1810.

## c. Adactylotis, p., Hüb. V. 304, 1816.

6. EPHYRA TRILINEARIA. The Clay Triple-lines.

B. M.

Phalæna-G. trilinearia, Bork. E. S. v. 502, 1794. Ephyra trilinearia, Step. H. iii. 201, 1831. Wood, I. E. t. 20, f. 532. Geometra linearia, Hüb. Ge. t. 13, f. 68, 1796.

Sub-F. XI. EPIONIDI.

Epionidi, Step. MSS. Ennomidi, p., Dup. C. 216, 1846.

## 249. BRADYEPETES.

Bradyepetes, Step. (Cat. ii. 128, 1829). Id. H. iii. 201, 1831. Calothysanis, p., Hüb. V. 301, 1816. Timandra, p., Dup. L. F. viii. 105, 1829.

1. Bradyepetes amataria. The Blood-vein.

B. M.

Phalæna-G. amataria, Linn. F. ii. No. 1223, 1761.
Bradyepetes amataria, Step. H. iii. 202, 1831. Wood, I. E. t. 20, f. 533.
Phalæna-G. amata, Linn. S. Nat. i. 525, 1758.
Phalæna-G. vibicaria, Hüfn.—(Berl. M. iv. 514, 1770).
Phalæna amatorio, Don. B. I. i. 74, t. 33, f. 1, 1792.

#### 250. EPIONE.

Epione, Dup. L. F. viii. 105, 1829.

- a. EUCHLENA, Hüb. (V. 293, 1816).
- EPIONE APICIARIA. The Bordered Beauty.
   Geometra apiciaria, Schiff. (W. V. 104, 1776).
   Epione apiciaria, Step. H. iii. 203, 1831.
   Phalæna-G. marginaria, Vill. E. ii. 303, 1789.
   Phalæna vespertaria, Don. B. I. vii. 47, t. 233, f. 3, 1798.
- EPIONE VESPEBTARIA. The Dark-bordered Beauty.
   Phalæna-G. vespertaria, Linn. S. Nat. ii. 864, 1767.
   Epione vespertaria, Step. H. iii. 204, t. 28, f. 3, 1831.

#### 256. MESOGRAMMA.

Mesogramma, Step. MSS. Mesotype, p., Hüb. V. 338, 1816.

Mesogramma Lineolata. The Oblique Striped.
 B. M. Geometra lineolata, Schiff. (W. V. 102, 1776).
 Phibalapteryx? lineolata, Step. H. iii. 257, 1831. West. 4 H. M. ii. 49, t. 66, f. 12, 1843.

Pholæna-G. virgata, Hüfn.—(Berl. M. iv. 608, 1770). Var. a. Phibalapteryx virgata, Cur. B. E. xiii. t. 623, 1836. Phibalapteryx cognata, Step. (Cat. ii. 138, No. 6604, 1829).

# Sub-F. XIII. EUBOLIDI.

Eubolidi, Step. MSS. Eubolites, Dup. C. 247, 1846.

## 257. CELMA.

Celma, Step. H. iii. 242, 1831. Carsia, p., Hiib. V. 336, 1816. Larissa, p., Cur. B. E. vii. fo. 324, 1830.

 CRLMA IMBUTATA. The Manchester Treble-bar. Geometra imbutata, Hub. Ge. t. 78, f. 403, 1806. Larissa imbutata, Cur. B. E. vii. t. 324, 1830. Celma imbutata, Step. H. iii. 142, 1831.

# 258, ANAITIS.

B M.

Anaïtis, Dup. L. F. viii. 111, 1829. Carsia, p., Hüb. V. 336, 1816.

ANAITIS PLAGIATA. The Slender Treble-bar.
 Phakena-G. plagiata, Linn. S. Nat. i. 526, 1758.
 Anaïtis plagiata, Step. H. iii. 143, 1831. West. J. H. M. ii 43, t. 64, f. 25, 1843.
 Phakena duplicata, Fab. S. E. 63, 6, 1775.

Var. a. Anaïtis plagiata, Wood, I. E. t. 22, f. 596.

*2. Anaitis præformata. The Purple Treble-bar.

Geometra præformata, Hüb. Ge. t. 103, f. 532, 533, 1824. Anaïtis præformata, Step. H. iii. 244, 1831. Larentia Cassiata, Treit. S. vi. 2, 85, 1828.

#### 259. EUBOLIA.

Eubòlia, Dup. L. F. viii. 109, 1829. Larentia, p., Treit. (S. v. 2, 440, 1825). Cymazonita, Sodoff.—(Bull. S. I. Mosc. 13, 1837).

a. PLEROCYMIA, t., Hüb. V. 330, 1816.

1. EUBOLIA CERVINATA. The Mallow Moth.

B. M.

Geometra cervinata, Schiff. (W. V. 111, 1776). Larentia cervinata, Step. H. iii. 211, 1831. Cur. B. E. xv. t. 707, 1838. Geometra fasciaria, Schwar. R. K. 313, 1791.

Geometra clavaria, Haw. L. B. 302, 1810.

Phalæna limitata, Scop. ? C. No. 568, 1763.

b. Мезотуре, р., Hüb. V. 338, 1816.

[B. M.

EUBOLIA MENSURARIA. The Small Mallow, or Aurelian's Plague.
 Geometra mensuraria, Schiff. (W. V. 111, 1776).
 Geometra Chenopodiaria, Esp. S. v. (246), t. 44, f. 6—8, 1795—98.
 Geometra Chenopodiata, Haw. L. B. 302, 1810.
 Larentia Chenopodiata, Step. H. iii. 211, 1831.
 Larentia Chenopodiaria, West. & H. M. ii. 30, t. 62, f. 17, 22, 1843.

## 3. EUBOLIA MÆNIATA.

Phalæna mæniata, Scop. C. No. 561, 1763. Cidaria mæniaria, Treit. S. vi. 2, 173, 1828. Eubolia mæniaria, Dup. L. F. viii. 1, 164, pl. 182, f. 6, 1829. Eubolia mæniata, Staint. Ent. Ann. 1855, p. 42, front f. 3.

## 260. EUSEBIA.

Eusebia, *Dup. C.* 249, 1846. Entephria, p., *Hüb. V.* 332, 1816. t. Eusebia bipunctaria. The Chalk Carpet.

B. M.

Geometra bipunctaria, Schiff. (W. V. 111, 1776). Larentia bipunctaria, Step. H. iii. 212, 1831. West. & H. M. ii. 30, t. 62, f. 18, 1843. Phalana undulata, Scop.? (C. No. 555, 1763.

# 261, ERINOBIA.

Erinobia, Step. MSS.

1. ERINOBIA MULTISTRIGARIA. The Mottled Gray.

Geometra multistrigaria, Haw. L. B. 306, 1810.

Larentia? multistrigaria, Step. H. iii. 212, 1831. West. § H. M. ii. 31, t. 62, f. 20, 1843.

Eubolia occultaria, Bois. MSS.?

## 262. VENUSIA.

Venusia, Cur. B. E. xvi. fo. 759, 1839.

VENUSIA CAMBRICA. The Welsh Wave.
 Venusia cambrica, Cur. B. E. xvi. t. 759, 1839.
 Eubolia crutaria, Bois, I. M. 2 ed. 203, 1840.

## 263. COREMIA.

Coremia, Guén.—Dup. C. 249, 1846. Cidaria, p., Treit. (S. v. 2, 442, 1825). Zerynthia, Cur. B. E. vii. fo. 298, 1830. Zonodonta, Sodoff.—(Bull. S. I. Mosc. 18, 1837).

a. Tephronia, p., Hüb. V. 317, 1816.

COREMIA DIDYMATA. The Twin-spot Carpet.
 Phalæna-G. didymata, Linn. S. Nat. i. 528, 1758.
 Cidaria didymata, Step. H. iii. 214, 1831. West. & H. M. ii. 33, t. 63, f. 1, 1843.
 Geometra scabrata, Hüb. Ge. t. 44, f. 229, 1798.

b. MALENYDRIS, Hüb. V. 329, 1816.

 COREMIA SALICATA. The Striped Twin-spot Carpet. Geometra Salicata, Schiff. (W. V. 109, 1776). Cidaria Salicata, Step. H. iii. 217, 1831.
 Geometra Salicaria, Hüb. Ge. t. 53, f. 273, 1799. Wood, I. E. t. 21, f. 554.

Var. a. Zerynthia latentaria, Cur. B. E. vii. t. 296, 1830. Cidaria latentaria, Step. H. iii. 217, 1831.

## c. Ochyria, Hüb. V. 334, 1816.

3. COREMIA FERRUGATA. The Red Twin-spot Carpet. B. M. Phalæna-G. ferrugata, Linn. F. ii. No. 1292, 1761. Cidaria ferrugata, Step. H. iii. 216, 1831. Wood, I. E. t. 1, f. 553. Phalæna-G. corculata, Hüfn.—(Berl. M. iv. 616, 1770).

Geometra Alchemillata, Esp. S. v. t. 40, f. 5, 6, 1795.

Var. a. Phalæna-G. Linariaria, Bork. E. S. v. 381, 1794.

Var. b. Phalæna-G. spadicearia, Bork. E. S. v. 389, 1794.

Var. c. Geometra Salicaria, Haw. L. B. 309, 1810.

[B. M.

4. COREMIA UNIDENTARIA. The Dark-barred Twin-spot Curpet.

Geometra unidentaria, Haw. (Pr. 23, 1802). Id. L. B. 308, 1810.

Cidaria unidentaria, Step. H. iii. 215, 1831. Wood, I. E. t. 21, f. 551.

Geometra quadrifasciaria, Hüb. Ge. t. 55, f. 284? 1799. Eubolia ferrugaria, var., Bois. MSS.?

- COREMIA LIGUSTRATA. The Large Twin-spot Carpet. B. M. Geometra Ligustrata, Hüb. Ge. t. 55, f. 282, 1799.
   Phalæna-G. quadrifasciaria, Linn. ? F. ii. No. 1253, 1761.
   Cidaria quadrifasciaria, Step. H. iii. 215, 1831. Wood, I. E. t. 11, f. 552.
  - d. Plemmyra, p., Hüb. V. 327, 1816.
- 6. COREMIA FLUCTUATA. The Garden Carpet. B. M. Phalæna-G. fluctuata, *Linn. S. Nat.* i. 527, 1758. Cidaria fluctuata, *Step. H.* iii. 219, 1831. West. & H. M. ii. 34, t. 63, f. 12, 13, 1843.

Var. a. Phalæna costovata, Haw. (Pr. 25, 1802). Id. L. B. 334, 1810.

Var. b. Coremia integrata, Step. MSS.

# е. Хамтновнов, р., Нив. V. 327, 1816.

7. COREMIA MONTANATA. The Silver Ground Carpet. B. M. Geometra montanata, Schiff. (W. V. 113, 1776).
Cidaria montanata, Step. H. iii. 219, 1831. West. & H. M. ii. 34, t. 63, f. 11, 1843.
Phalæna-G. implicata, Vill. E. ii. 386, t. 6, f. 21, 1789.

## f. AMÆBE, Hüb, V. 333, 1816.

8. Coremia olivata. The Beech-green Carpet. B. M. Geometra olivata, Schiff. (W. V. 112, 1776). Cidaria olivata, Step. H. iii. 218, 1831. Wood, I. E. t. 21, 6 557.

Geometra alboviridaria, Haw. (Pr. 23, 1802).
 Phalæna alboviridata, Haw. (Pr. 26, 1802).

COREMIA MIARIA. The Green Carpet.
 Geometra miaria, Schiff. (W. V. 113, 1776).
 Cidaria miaria, Step. H. iii. 218, 1831. Wood, I. E. t. 21, 6 556.
 Phalæna-G. rectangulata, Hüfn.—(Berl. M. iv. 606, 1770).
 Phalæna viridata, Fab. S. E. 626, 1775.
 Geometra pectinitaria, Fuest. M. i. 218, 1782.
 Phalæna pectinitaria, Don. B. I. xiv. 33, t. 479, f. 1, 1810

g. Cidaria, Treit. (S. v. 2, 442, 1825). Ochyria, p., Hüb. V. 334, 4816.

10. Coremia propugnata. The Flame Carpet. B. M. Geometra propugnata, Schiff. (W. V. 112, 1776). Cidaria propugnata, Step. H. iii. 220, 1831. Wood, I. E. t. 21, f. 560. Phalæna-G. designata, Hüfn.—(Berl. M. iv. 612, 1770). Phalæna lynceata, Don. B. I. x. 65, t. 349, f. 3, 1801.

# h. Ochveta, p., Hub. V. 334, 1816.

11. COREMIA MUNITATA. The Red Carpet.

Geometra munitata, Hüb. Ge. t. 66, f. 346, 1801.
Cidaria munitata, Step. H. iii. 215, 1831. Wood, I. E. t. 21, f. 550.

B. M.

## Sub-F. XIV. CIDARIDI.

Cidaridi, Step. MSS. Cidarites, Dup. C. 251, 1846.

#### 264. ELECTRA.

Electra, Step. (Cat. ii. 135, 1829). Id. H. iii. 238, 1831.

a. PELURGA, Hüb. V. 334, 1816.

- ELECTRA SAGITTATA.* The Marsh Carpet.
   Phalæna Sagittata, Fab. M. ii. 210, 1787.
   Geometra comitata, Hüb. Ge. t. 60, f. 310, 1800.
- ELECTRA CHENOPODIATA. The Dark Spinach Moth. B. M. Phalæna-G. Chenopodiata, Linn. ? F. ii. No. 1263, 1761. Geometra Chenopodiata, Hüb. Ge. t. 58, f. 299, 1800. Phalæna-G. comitata, Linn. Mus. Electra comitata, Step. H. iii. 239, 1831. West. & H. M. ii. 42, t. 64, f. 18, 1843.

# b. Lygris, Hüb. V. 335, 1816.

3. ELECTRA POPULATA. The Northern Spinach Moth.

Phalæna-G. Populata, Linn. ? S. Nat. i. 525, 1758.

Electra Populata, Step. H. iii. 239, 1831. West. § H. M. ii.
42, t. 64, f. 19, 20, 1843.

Phalæna-G. dotata, Linn. Mus.

Phalæna cuspidata, Stew. E. ii. 164, 1802.

4. ELECTRA ACHATINATA. The Broad Chiverned Moth.

Geometra Achatinata, Hüb. Ge. t. 58, f. 301, \$\delta\$; t. 79, f. 408, \$\Q\$, 1800—7.

Electra Achatinata, Step. H. iii. 241, 1831. Wood, I. E. t. 22, f. 593, \$\Q\$.

Phalæna-G. testata, Linn. \$\textit{F}\$ F. ii. No. 1262, 1761.

Electra testata, Step. H. iii. 240, \$\delta\$, 1831. Wood, I. E. t. 22, f. 592, \$\delta\$.

5. ELECTRA PYRALIATA. The Barred Straw.

B. M.

Geometra Pyraliata, (Schiff. (W. V. 117, 1776). Electra Pyraliata, Step. H. iii. 241, 1831. Wood, I. E. t. 22, f. 594.

Phalæna-G. Populata, Clerck, Ic. 5, f. 13, 14, 1758.

c. EUPHYIA, Hub. V. 336, 1816.

6. ELECTRA MARMOBATA. The Spinach.

В. М.

Geometra marmorata, Hüb. Ge. t. 54, f. 279, 1709. Phalæna Spinachiata, Haw. (Pr. 26, 1802). Id. L. B. 341, 1810.

Electra Spinachiata, Step. H. iii. 240, 1831. West. & H. M. ii. 42, t. 64, f. 21, 1843.

Phalæna-G. dotata, Clerck, Ic. 5, f. 15, 1758.

## 265. HARPALYCE.

Harpalyce, Step. (Cat. ii. 131, 1829). Id. H. iii. 220, 1831.

в. Еприча, р., Нив. V. 336, 1816.

I. HARPALYCE FULVATA. The Clouded Yellow.

B. M.

Phalmua-G. fulvata, Forst. Cent. 76, 1771.—(Schiff. W. V. 112, 1776).

Harpalyce fulvata, Step. H. iii. 221, 1831. Wood, I. E. t. 21, f. 561.

Phalæna sociata, Fab. S. E. 637, 1775.

2. HARPALYCE OCELLATA. The Purple Bar.

B. M.

Phalana-G. ocellata, Linn. S. Nat. i. 527, 1758. Harpalyce ocellata, Step. H. iii. 222, 1831. Wood, I. E. L. 21, f. 562.

b. Совмовнов, Hüb. V. 326, 1816.

Phalæna fasciata, Scop. C. No. 550, 1763. Phalæna-G. tridentata, Hüfn.—(Berl. M. iv. 618, 1770). Phalæna lyncea, Fab. S. E. 635, 1775.

с. Хантновное, р., Нив. V. 327, 1816.

3. HARPALYCE GALIATA. The Galium Carpet. B. M. Geometra Galiata, Schiff. (W. V. 113, 1776).

Harpalyce Galiata, Step. H. iii. 222, 1831. Wood, I. E. t. 21, f. 563.

Var. a. Geometra chalybeata, Hüb. Ge. t. 67, f. 350, 1802.

Var. b. Phalæna unilobata, Haw. L. B. 331, 1810.

Harpalyce unilobata, Step. H. iii. 223, 1831. Wood, I. E. t. 2Ī, f. 564.

Var. c. Phalæna 4-annulata, Haw. L. B. 331, 1810. Harpalyce 4-annulata, Step. H. iii. 223, 1831. Wood, I. E. t. 21, f. 565.

## d. Euphyia, p., Hüb. V. 326, 1816.

4. HARPALYCE PICATA. The Short Cloak Carpet. B. M. Geometra picata, Hüb. Ge. t. 84, f. 435, 1809. Phalæna biangulata, Haw. (Pr. 26, 1802). Id. L. B. 326, 1810. Harpalyce biangulata, Step. H. iii. 225, 1831. Wood, I. E. t.

> 21, f. 570. e. Amorbe, p., Hüb. V. 333, 1816.

Electra, p., Cur. B. E. xiii. fo. 603, 1836.

5. HARPALYCE CORYLATA. The Broken-barred Carpet. B. M. Geometra Corylata, Thunb. I. S. 61, t. 4, fig. 1792. Harpalyce Corylata, Step. H. iii. 227, 1831. Wood, I. E. t. 21, f. 572.

Var. a. Geometra ruptata, Hüb. Ge. t. 57, f. 295, 1799. Phalæna interruptata, Haw. (Pr. 26, 1802).

Var. b. Electra albocrenata, Cur. B. E. xiii. t. 603, 1836.

Var. c. Harpalyce atrofasciata, Step. MSS.

# f. Eustroma, p., Hüb. V. 335, 1816.

6. HARPALYCE SILACEATA. The Small Phoenix Moth. B. M. Geometra Silaceata, Schiff. (W. V. 113, 1776). Harpalyce Silaceata, Step. H. iii. 226, 1831. Wood, I. E. t. 21, f. 571.

Phalæna insulata, Haw. (Pr. 26, 1802). Id. L. B. 330, 1810. Phalæna insulata, Haw. (Pr. 26, 1802). 1a. L. B. 550
 Phalæna cuneata, Don. B. I. xiv. 51, t. 487, f. 2, 1810.

## 266. STEGANOLOPHIA.

Steganolophia, Step. (Cat. ii. 135, 1829). Id. H. iii. 232, 1831.

# a. EUSTROMA, p., Hüb. V. 355, 1816.

## 1. STEGANOLOPHIA PRUNATA. The Phoenix.

B. M.

Phalwna Prunata, Linn. S. Nat. i. 526, 1758. Steganolophia Prunata, Step. H. iii. 232, 1831. West. & H. M. ii. 90, t. 64, f. 4—6, 1843. Cidaria Ribesiaria, Bois. (I. M. 2 ed 214, 1840).

## 267. LAMPROPTERYX.

Lampropteryx, Step. H. iii. 233, 1831.

a. Eustroma, p., Hüb. V. 335, 1816.

LAMPROPTERYX SUFFUMATA. The Water Carpet.
 Geometra suffumata, Schiff. (W. V. 316, 1776).
 Lampropteryx suffumata, Step. H. iii. 124, 1831. Wood, I. E. t. 21, f. 582.
 Phalæna insititata, Haw. (Pr. 25, 1802).

Var. a. Lampropteryx piceata, Step. H. iii. 234, 1831. Wood, I. & t. 22, f. 583.

# b. AMOEBE, p., Hub. V. 333, 1816.

LAMPROPTERYX HADIATA. The Shoulder Stripe.
 Geometra badiata, Schiff. (W. V. 111, 1776).
 Lampropteryx badiata, Step. H. iii. 235, 1831. Wood, I. E. t. 22, f. 584.

# Phalæna berberata, Don. B. I. xiv. 65, t. 493, f. 1, 1810. 268. ANTICLEA.

Anticlea, Step. H. iii. 236, 1831. Amæbe, p., Hüb. V. 333, 1816. Cidaria, p., Cur. (G. 163, 1831).

Anticlea Berberata. The Barbary Carpet.
 Geometra Berberata, Schiff. (W. V. 113, 1776).
 Anticlea Berberata, Step. H. iii. 235, 1831. Wood, I. E. t. 22, I. 585.

2. ANTICLEA RUBIDATA. The Flame.

B. M.

Geometra rubidata, Schiff. (W. V. 113, 1776).

Anticlea rubidata, Step. H. iii. 236, 1831. Wood, I. E. t. 22, f. 586.

3. Anticlea derivata. The Streamer.

B. M.

Geometra derivata, Schiff. (W. V. 113, 1776).
Anticlea derivata, Step. H. iii. 237, 1831. Wood, I. E. t. 22, f. 587.
Phalæna nigrofasciaria, Goetz. B. iii. 438, 1780.

Phalæna nigrofasciaria, Goetz. B. 111. 438, 1780. Phalæna-G. violacea-nigrostriata, Vill. E. ii. 613, 1789. Phalæna fimbriata, Fab. P. E. S. iii. 2, 187, 1794.

4. ANTICLEA SINUATA. The Royal Mantle.

B. M.

Geometra sinuata, Schiff. (W. V. 114, 1776). Anticlea sinuata, Step. H. iii. 237, 1831. Wood, I. E. t. 22, f. 587.

Phalæna regalata, Haw. (Pr. 25, 1802).

#### 269. APLOCERA.

Aplocera, Step. (Cat. ii. 141, 1829). Id. H. iii. 295, 1831.

a. GLAUCOPTERYX, Hüb. V. 332, 1816.

1. APLOCERA CÆSIATA. The February Carpet.

B. M.

Geometra cæsiata, Schiff. (W. V. 112, 1776).

Aplocera cæsiata, Step. H. iii. 295, 1831. Wood, I. E. t. 25, f. 690.

Var. a. Phalæna infrequentata, Haw. L. B. 330, 1810.

b. Entephria, Hüb. V. 332, 1816.

APLOCERA FLAVICINCTATA. The Yellow-ringed Carpet. B. M. Geometra flavicinctata, Hüb. Ge. t. 68, f. 354, 1802.
 Aplocera flavicinctata, Step. H. iii. 296, t. 30, f. 3, 1832.

## 270. CHLOROCLYSTA.

Chloroclysta, Hüb. V. 332, 1816. Euthalia, Step. H. iii. 252, 1831. Ypsipetes, p., Step. (Cat. ii. 138, 1829). 1. Chloroclysta miata. The Autumu Green Carpet. B. M. Phalama-G. miata, Linn. S. Nat. i. 526, 1758. Phalama miata, Don. B. I. xiv. 33, t. 479, f. 3, 1810. Euthalia miata, Step. H. iii. 253, 1831. Phalama luctuata, Fab. M. I. ii. 209, 1787.

Geometra coraciata, Hilb. Ge. t. 54, f. 278, 1799.

2. Chloroclysta Peittacata. The Red-green Carpet. B. M. Geometra Psittacata, Schiff. (W. V. 112, 1776). Euthalia Psittacata, Step. H. iii. 253, 1831. Wood, I. E. t. 22, f. 609. Phalana-G. Siterata, Hüfn.—(Berl. M. iv. 522, 1770).

Phalana rubroviridata, March. MSS. Don. B. I. xiv. 47, t. 485, f. 3, 1810.

## 271. HYDRIOMENA.

Hydriomena, Hüb. V. 322, 1816. Ypsipetes, Step. (Cat. ii. 138, 1829).

1. HYDRIOMENA IMPLUVIATA. The May Highflyer. B. M. Geometra impluviata, Schiff. (W. V. 109, 1776).

Ypsipetes impluviata, Step. H. iii. 254, 1831. Wood, J. E. 1. 22, f. 610.

Geometra trifasciata, Thunb. I. S. 13, 1784.

Phalæua literata, Don. B. I. xiv. 80, t. 499, f. 2, 1810.

Hydriomena elutata. The July Highflyer.
 Geometra elutata, Schiff. (W. V. 109, 1776). Hüb. Ge. L. 74, f. 381-385, 1806.
 Ypsipetes elutata, Step. H. iii. 254, 1831. Wood, I. E. L. 22, f. 611.

Phalwna-G. virgata, Vill. E. ii. 379, 1789. Var. a. Phalwna fusco-undata, Don. B. I. xii. 73, t. 386, f. 3, 1807. Var. b. Phalwna borridaria, Haw. (Pr. 24, 1802).

3. HYDRIOMENA RUBERATA. The Marsh Highflyer. B. M. Geometra ruberata, Frey. N. B. i. 67, t. 36, f. 2, 1834. Hydriomena impluviata, p., Step. Mus. Cat. 195.

# 272. POLYPHASIA.

Polyphasia, Step. H. iii. 227, 1831. Dysstroma, t., Hüb. V. 333, 1816. 1. Polyphasia Russata. The Marbled Carpet.

B. M.

Geometra russata, Schiff. (W. V. 113, 1779). Phalæna centumnotata, Fab. M. I. ii. 207, 1787.

Polyphasia centumuotata, Step. H. iii. 230, 1831. Wood, I. E. t. 21, f. 578.

Phalæna-G. truncata, *Hüfn.*—(Berl. M. iv. 602, 1770).

Var. a. Phalæna commanotata, Haw. L. B. 325, 1810.

Wood, I. Polyphasia commanotata, Step. H. iii. 230, 1831. E. t. 21, f. 577.

Var. b. Polyphasia saturata, Step. H. iii. 231, 1831. Wood, I. E. t. 21, f. 579.

Var. c. Phalæna perfuscata, Haw. L. B. 325, 1810. Wood, I. E. t. 21, f. 580.

Geometra russata, Hüb. Ge. t. 86, f. 445, 1807.

Var. d. Electra boreata, Cur. (G. 163, 1831).

Var. e. Polyphasia concinuata, Step. H. iii. 229, 1831. Wood, I. E. t. 21, f. 576.

2. Polyphasia immanata. The Dark-marbled Carpet. B. M. Phalæna immanata, Marsh. MSS.—Haw. L. B. 323, 1810. Polyphasia immanata, Step. H. iii. 228, 1831. Wood, I. E. t. 21, f. 573.

Var. a. Polyphasia amœnata, Step. H. iii. 228, 1831. Wood, 1. E.

t. 21, f. 574.

Geometra Passeraria, Frey. N. B. vi. 10, t. 486, f. 3, 1846.

Var. b. Phalæna marmorata, Haw. L. B. 324, 1810. Wood, I. E. t. 21, f. 575.

#### 273. THERA.

Thera, Step. H. iii. 271, 1831. Dysstroma, p., Hüb. V. 333, 1816.

1. THERA JUNIPERATA. The Juniper Carpet.

B. M.

Phalæna-G. Juniperata, Linn. S. Nat. i. 527, 1758. Thera Juniperata, Step. H. iii. 272, t. 31, f. 2, 1831.

2. THERA VARIATA. The Gray Carpet.

B. M.

Geometra variata, Schiff. (W. V. 110, 1776). Thera coniferata, Cur. B. E. xi. t. 519, 1834. Step. H. iv. 392, 1835.

Var. a. Geometra variata, Hüb. Ge. t. 73, f. 380, 1805.

3. THERA SIMULATA. The Shaded Broad-bur. B. M.

Geometra simulata, Hub. Ge. t. 66, f. 345, 1801. Phalæna variata, Hatchett. - Ent. Tr. i. 245, t. 7, f. 1, 1812. Thera variata, Step. H. iii. 272, 1831.

Phalana Juniperata, Haw. (Pr. 26, 1802).

Var. a. Phahena tristrigata, Don. B. I. xiii. 60, t. 461, f. 2, 1808. Phalana munitata, Haw. L. B. 328, 1810.

Var. b. Thera fulvata, Step. H. iii. 272, 1831. Wood, I. E. t. 23. f. 636.

4. THERA? FIRMABIA. The Pine Carpet.

B. M.

Geometra firmaria, Hüb. Ge. t. 100, f. 415, 1816. Thera simulata, Step. H. iii. 271, 1831. Wood, I. E. t. 23, f. 634.

## 274. CHEIMATOBIA.

Cheimatobia, Step. (Cat. ii. 142, 1829). Id. H. iii. 274, 1831.

a. THERIA, Hub. V. 321, 1816.

1. CHEIMATOBIA RUPICAPRARIA. The Early Moth. B. M.

Geometra rupicapraria, Schiff. (W. V. 105, 1776). Cheimatobia rupicapraria, Step. H. iii. 275, 1831. Wood, L. E. t. 23, f. 641a, &, f. 641n, Q. Geometra primaria, Marsh. MSS .- Haw. L. B. 305, 1810

b. OPEROPHTERA, Hub. V. 321, 1816.

2. CHEIMATOBIA BRUMATA. The Winter Moth.

B. M.

Phalæna-G. brumata, Linn. S. Nat. i. 529, 1758. Cheimatobia brumata, Step. H. iii, 274, 1831. Wood, I. E. t. 23, f. 640a, ♂, f. 640n, ♀. Phalana-G. hyemata, Hufn.—(Berl. M. iv. 612, 1770). Cheimatobia vulgaris, Step. (Cat. ii. 142, 1829).

3. CHEIMATOBIA BOBEATA.* The Northern Winter Moth. B. M. Geometra horeata, Hüb. Ge. t. 80, f. 413, &; f. 414, 9, 1806.

## 275. OPORABIA.

Oporabia, Step. H. iii. 273, 1631. Oporinia, p., Hüb. V. 322, 1816.

- 1. OPORABIA DILUTATA. The November Moth.
- B. M.
- Geometra dilutata, Schiff. (W. V. 109, 1776).
   Oporabia dilutata, Step. H. iii. 273, 1831. West. & H. M. ii. 56, t. 68, f. 7, 8, 1843.
- Var. a. Phalæna-G. 4-fasciata, Bork. E. S. v. 294, 1794.
- Var. b. Phalæna-G. affinitata, Bork. E. S. v. 294, 1794.
- Var. c. Phalæna omicrata, Haw. (Pr. 25, 1802).

Phalæna inscriptata, Don. B. I. xv. 25, t. 517, 1811.

- Var. d. Phalæna fimbriata, Haw. L. B. 320, 1810.
- 2. OPORABIA NEGLECTATA. The Neglected November Moth. B. M. Oporabia neglectata, Step. MSS. (Var. præc.?).
- 3. OPORABIA AUTUMNARIA. The Autumnal Moth. B. M. Larentia autumnaria, Bois. MSS.?—Doub. (List, 18, 1850). Oporabia polata, West. & H. M. ii. 56, t. 68, f. 9, 1843.
- OPORABIA FILIGRAMMARIA. The Small Autumnal Moth. B. M. Larentia filigrammaria, Bois. MSS.?—H.-Schæff. S. iv. 160, t. 32, f. 194—5, 1846. Doub. (List, 18, 1850).

#### 276. ACASIS.

Acasis, Dup. C. 256, 1846. Trichopteryx, p., Hüb. V. 323, 1816.

Acasis Viretata. The Brindle-barred Yellow.
 Geometra viretata, Hüb. Ge. t. 44, f. 230, 1799.
 Lobophora viretata, Step. H. iii. 278, 1831. Wood, I. E. t. 23, f. 646.
 Phalæna trinotata, Don. B. I. xiv. 79, t. 499, f. 1, 1810.

#### 277. LOBOPHORA.

Lobophora, Step. MSS.—Cur. B. E. ii. fo. 81, 1825. Amathia, Dup. L. F. viii. 112, 1829.

## а. Lоворнова.

Oporinia, p., Hüb. V. 322, 1816.

 LOBOPHORA POLYCOMMATA. The Barred Tooth-striped. B. M. Geometra polycommata, Schiff. (W. V. 109, 1776). Lobophora polycommata, Cur. B. E. ii. 1. 81, 1825. Step. H. iii. 276, 1831.

# b. TRICHOPTERYX, p., Hüb. V. 323, 1816.

2. LOBOPHORA LOBULATA. The Early Tooth-striped.

Geometra lobulata, Hüb. Ge. t. 70, f. 362, 1804?

Lobophora lobulata, Wood, J. E. t. 23, f. 644—6.

Phalæna dentistrigata, Haw. L. B. 320, 1810.
 Lobophora lobulata, Step. H. iii. 277, 1831. Wood, I. E. t. 23, f. 643.

Phalæna costæstrigata, Haw. L. B. 319, 1810.
 Lobophora costæstrigata, Step. H. iii. 277, 1831. Wood, I. E. t. 23, f. 644.

Var. a. Lobophora rupestrata, Step. H. iii. 277, 1831. Wood, I. E. t. 23, f. 645.

# C. PTERAPHERAPTERYX, Leach, MSS.

Lobophora нехартевата. The Seraphim.
 Geometra hexapterata, Schiff. (W. V. 109, 1776).
 Lobophora hexapterata, Step. H. iii. 278, 1831. Wood, I. E. t. 23, f. 647, \$.
 Phalma-G. halterata, Hüfn.—(Berl. M. iv. 608, 1770).

2. Geometra zonata, Thunb. 7 I. S. 60, t. 4, f. 7, 1792.

4. Lobophora Sexalisata. The Small Scraphim. B. M. Geometra Sexalisata, Hüb. Beit. i. 17, t. 2, f. L, 1789. Lobophora Sexalisata, Step. H. iii. 278, 1831. Wood, I. E. t. 23, f. 648, 3. Phalæna-G. Sexalata, Bork. E. S. v. 304, 1794. Geometra Sezalata, Hüb. Ge. t. 44, f. 222, 3, 1798.

# 278. EUPITHECIA.

Eupithecia, Cur. B. E. ii. fo. 64, 1825.

а. Епсуматове, Нив. V. 325, 1816.

Geometra togata Hiib. Ge. t. 90, f. 464, 1810?
Eupithecia togata, Newm. — Zool. iii. 1086, t. adj. 1845.

2. EUPITHECIA LINARIATA. The Beautiful Pug.

B. M.

Geometra Linariata, Schiff. (W. V. 113, 1776). Eupithecia Linariata, Cur. B. E. ii. t. 64, 1825. Step. H. iii. 279, 1831.

3. EUPITHECIA PULCHELLATA. The Red Pug.

B. M.

Eupithecia pulchellata, Step. (Cat. ii. No. 6643, 1829). Id. H. iii. 279, 1831. Wood, I. E. t. 23, f. 650. Eupithecia Antirrhinaria, Bois. MSS.

- b. CHLOROCLYSTIS, Hüb. V. 323, 1816.
- 4. EUPITHECIA BECTANGULATA. The Green Pug. B. M. Phalæna-G. rectangulata, Linn. S. Nat. i. 528, 1758,

Eupithecia rectangulata, Step. H. iii. 280, 1831. Wood, I. E. t. 23, f. 651.

Phalæna-G. viridulata, Hüfn.—(Berl. M. iv. 524, 1770).

Var. a. Phalæna sericeata, Haw. L. B. 363, 1810.

f. 655.

Var. b. Phalæna nigrosericeata, Haw. L. B. 363, 1810.

Eupithecia nigrosericeata, Step. H. iii. 281, 1831. Wood, I. E. t. 24, f. 654.

- Var. c. Eupithecia subærata, Step. H. iii. 280, 1831. Wood, I. E. t. 23, f. 652.
- EUPITHECIA CORONATA. The V Pug.
   Geometra coronata, Hüb. Ge. t. 72, f. 372—73, 1804.
   Phalæna V-ata, Haw. L. B. 364, 1810.
   Eupithecia V-ata, Step. H. iii. 281, 1831. Wood, I. E. t. 24.
- EUPITHECIA DEBILIATA. The Devon Pug. B. M. Geometra debiliata, Hüb. Ge. t. 91, f. 466, 1810?
   Eupithecia nigropunctata, Chant.—Ent. M. i. 184, 1833.
   Wood, I. E. t. 24, f. 653.
  - c. Tephroclystia, Hüb. V. 323, 1816.
- 7. EUPITHECIA PUMILATA. The Double-striped Pug. B. M. Geometra pumilata, Hüb. Ge. t. 75, f. 388, 1804. Phalæna bistrigata, Haw. L. B. 361, 1810. Eupithecia Strobilata, Step. H. iii. 282, 1831. Wood, I. E. t. 24, f. 656.

- EUPITHECIA RUPIFASCIATA. The Red-barred Pug. B. M. Phalæna rufifasciata, Haw. L. B. 361, 1810.
   Eupithecia rufifasciata, Step. H. iii. 282, 1831. Wood, I. E. 24, f. 657.
   Eupithecia recictaria, Bois. I, M. 2 ed. 209, 1840.
- 9. EUPITHECIA PUSILLATA. The Dwarf Pug. B. M. Geometra pusillata, Hüb. Ge. t. 73, f. 378, 1806.
- EUPITHECIA BEGRANDARIA. The Small Gray Pug. B. M. Eupithecia Begrandaria, Bois. I. M. 2 ed. 211, 1840. Phalæna pusillata, Haw. L. B. 359, 1810.
   Eupithecia pusillata, Step. H. iii. 287, 1831. Wood, I. E. t. 24, f. 673.
   Eupithecia? Valerianata, Zell.—Isis, 193, 1846.
- EUPITHECIA PLUMBEOLATA. The Lead-coloured Pug. B. M. Phalæna plumbeolata, Haw. L. B. 360, 1810.
   Eupithecia plumbeolata, Step. H. iii. 287, 1831. Wood, I. E. t. 24, f. 674.
- EUPITHECIA PALUSTRARIA. The Marsh Pug. B. M. Eupithecia palustraria, Doub. (List, 19, 1850). Id. Zool. App. cv. 1850.
- 13. EUPITHECIA SATYBATA. The Beech Pug. B. M. Geometra Satyrata, Hüb., Freyer. Eupithecia fagicolaria, Green, Zoologist, 4187.
- EUPITHECIA CALLUNARIA. The Heath Pug. B. M. Eupithecia Callunaria, Stainton, MSS. Doub.—Zool. App. cv. 1850.
   Eupithecia cinercata, (Cur. G. 162, 1831).
- Eupithecia subumbrata, The Small-brindled Pug. B. M. Geometra subumbrata, Hüb. Ge. t. 45, f. 233, 1798.
   Eupithecia subumbrata, Step. H. iii. 284, 1831. Wood, I. E. t. 24, f. 664.
- 16. EUPITHECIA SUBNOTATA. The Plain Pug. B. M. Geometra subnotata, Hüb. Ge. t. 89, f. 458, 1809.

Phalæna simpliciata, Haw. L. B. 359, 1810. Eupithecia simpliciata, Step. H. iii. 287, 1831. Wood, I. E. t. 24, f. 672. Eupithecia denotaria, Bois. Mus. (teste Doub.)

d. TARACHIA, Hüb. V. 324, 1816.

- 17. EUPITHEOIA CASTIGATA. The Gray Pug. B. M. Geometra castigata, Hüb. Ge. t. 89, f. 456, 1809. Phalæna singulariata, Haw. L. B. 360, 1810. Eupithecia singulariata, Step. H. iii. 283, 1831. Wood, I. E. t. 24, f. 661. Eupithecia Valerianaria, Bois. Mus. (teste Doub.).
- Var. a. Phalæna nebulata, Haw. P. L. B. 360, 1810.
  Eupithecia nebulata, Step. H. iii. 284, 1831. Wood, I. E. t. 24, f. 662.
- EUPITHECIA SUBFASCIATA. The Barred Pug. B. M. Eupithecia subfasciata, Step. H. iii. 284, 1831. Wood, I. E. t. 24, f. 665.
- EUPITHECIA AUSTERATA. The Common Pug. B. M. Geometra austerata, Hüb. Ge. t. 89, f. 457, 1809.
   Phalæna vulgata, Haw. L. B. 359, 1810.
   Eupithecia vulgata, Step. H. iii. 285, 1831. Wood, I. E. t. 24, f. 666.
   Eupithecia Pimpinellaria, Bois. Mus. (teste Doub.).
- Var. a. Phalæna subfuscata, Haw. L. B. 360, 1810.
  Eupithecia subfuscata, Step. H. iii. 285, 1831. Wood, I. E. t. 24, f. 667.
- EUPITHECIA SOBRINATA. The Juniper Pug. B. M. Geometra Sobrinata, Hüb. Ge. t. 90, f. 465, 1810.
   Var.? a. Phalæna lævigata, Haw. L. B. 362, 1810.
   Eupithecia lævigata, Step. H. iii. 282, 1831. Wood, I. E. t. 24, f. 658.
  - e. Dyscymatoge, Hüb. V. 324, 1816.
- 21. EUPITHECIA EXIGUATA. The Mottled Pug. B. M. Geometra exiguata, Hüb. Ge. t. 73, f. 379, 1804.

Enpithecia exiguata, Step. H. iii. 283, 1831. Wood, L. E. t. 24, f. 659.

Phalana trimaculata, Haw. L. B. 362, 1810.

- Var. a. Eupithecia ochreata, Step. (Cat. ii. No. 6654, 1829).
- Eupithecia abbreviata. The Short-winged Pug. B. M. Eupithecia abbreviata, Step. (Cat. ii. No. 6665, 1829). Id. H. iii. 283, 1831. Wood, I. E. t. 24, f. 660. Eupithecia redactaria, Bois. I. M. 2 ed. 209, 1840.
- 23. EUPITHECIA INNOTATA.* The Angle-barred Pug. B. M. Pbalæna-G. innotata, Hüfn.—(Berl. M. iv. 616, 1770). Geometra innotata, Hüb. Ge. 1. 86, f. 441, 442, 1809.
- 24. EUPITHECIA LANCROLARIA.* The Southern Pug. B. M. Lurentia? lanceolaria, Ramb. F. And. (teste Bois. C. 209, 1840).
- 25. EUPITHECIA TENUIATA.* The Slender Pug. B. M. Geometra tenuiata, Hüb. Ge. t. 76, f. 394, 1805.
- 26. Eupithecia minutata, The Wormwood Pug. B. M. Geometra minutata, Schiff. ? (W. V. 110, 1776). Phalæua-G. Absinthiata, Linn. ? F. ii. No. 1296, 1761. Eupithecia Absinthiata, Step. H. iii. 286, 1831. Wood, I. B. t. 24, f. 669.

Var. a. Eupithecia iunotata, Step. H. iii. 285, 1831. Wood, I. E. t. 24, f. 668.

- Eupithecia elongata, Haw. L. B. 358, 1810.
   Eupithecia elongata, Step. H. iii. 286, 1831. Wood, I. E. t. 24, f. 671.
- Var. a. Eupithecia notata, Step. H. iii. 286, 1831. Wood, I. E. t. 24, f. 670.
- 28. EUPITHECIA INDIGATA. The Ochreous Pug. B. M. Geometra indigata, Hüb. Ge. t. 77, f. 399, 1805.
- 29. EUPITHECIA NANATA. The Narrow-winged Pug. B. M. Geometra nanata, Hüb. Ge. t. 75, f. 387, 1804. Phalæna angustata, Haw. L. B. 362, 1810.

Eupitheoia angustata, Step. H. iii. 289, 1831. Wood, I. E. t. 24, f. 680.

## f. Leucocoba, Hüb. V. 325, 1816.

- EUPITHECIA PIPERATA. The Speckled Pug. B. M. Eupithecia piperata, Step. H. iii. 288, 1831. Wood, I. E. t. 24, f. 678.
   Eupithecia obrutaria, H.-Schæff.? S. iv. 119, t. 24, f. 145, 146, 1848.
- 31. EUPITHECIA CENTAUREATA. The Lime Speck.

  Geometra centaureata, Schiff. (W. V. 114, 1776).

  Eupithecia centaureata, Step. H. iii. 289, 1831. Wood, I. E. t. 24, f. 679.

  Phalæna signata, Scop. C. No. 578, 1763.

  Phalæna-G. succenturiata, Hüfn.—(Berl. M. iv. 606, 1770).

  Geometra oblongata, Thunb. I. S. iv. 14, t. adj. 1784.
- [B. M. 32. EUPITHECIA SUCCENTURIATA. The Bordered Lime Speck. Phalæna-G. succenturiata, Linn. S. Nat. i. 528, 1758. Eupithecia succenturiata, Step. H. iii. 288, 1831. Wood, I. E. t. 24, f. 679. Geometra disparata, Hüb. Ge. t. 47, f. 246, 1798.
- EUPITHECIA COGNATA. The Red Lime Speck. B. M. Eupithecia cognata, Step. (Cat. ii. No. 6671). Id. H. iii. 288, 1831. Wood, I. E. t. 24, f. 676.
   Eupithecia succenturiata, var., H.-Schaff. S. iv. 119, 1848.
- 34. EUPITHECIA SUBFULVATA. The Tawny Speck. B. M. Phalæna subfulvata, Haw. L. B. 357, 1810. Eupithecia subfulvata, Step. H. iii. 287, 1831. Wood, I. E. t. 25, f. 675. Phalæna fulvata, Haw. (Pr. 27, 1802). Geometra disparata, Hüb. Ge. t. 47, f. 247, 1798. Larentia oxydata, Treit. S. vi. 2, 114, 1828.
- 35. EUPITHECIA IRRIGUATA. The Marbled Pug. B. M. Geometra irriguata, Hüb. Ge. t. 77, f. 397, 1807. Phalæna variegata, Haw. L. B. 362, 1810.

Eupithecia variegata, Step. H. iii. 290, 1831. Wood, I. E. t. 24, f. 681.

# g. ARAGONIA, Hub. V. 325, 1816.

- 36. EUPITHECIA CONSIGNATA. The Pinion Spotted Pug. B. M. Phalma-G. consignata, Bork. E. S. iv. 315, 1794. Eupithecia consignata, Step. H. iii. 290, 1831. Wood, I. E. 1. 24, 682. Geometra insigniata, Hüb. P. Beit. ii. 97, t. 3, f. U., 1789.
- 37. EUPITHECIA VENOSATA. The Pretty Widow. B. M. Geometra venosata, Fab. M. I. ii. 209, 1787. Eupithecia venosata, Step. H. iii. 290, 1831. Wood, I. E. t. 24, f. 683. Phalæna decussata, Don. B. I. viii. 38, t. 266, f. 3, 1799.

## Sub-F. XV. CHESIADI.

Chesiadi, Step. MSS.

## 279. PACHYCNEMIA.

Pachyenemia, Step. (Cat. ii. 141, 1829). Id. H. iii. 268, 1831. Alsophila, p., Hüb. V. 320, 1816. Sthanella, Bois. I. M. 2 ed. 229, 1840.

1. Pachyonemia Hippocastanaria, The Horse Chestnut. B. M. Geometra Hippocastanaria, Hüb. Ge. t. 36, f. 186, 1798. Pachyonemia Hippocastanaria, Step. H. iii. 269, 1831. Cur. B. E. xiii. t. 611, 1836. Phalæna? anomalata, Haw.—Ent. Tr. i. 337, 1812.

Var. a. Geometra degenerata, Hüb. Ge. t. 78, f. 405, Q? 1836.

## 280. EUCESTIA.

Eucestia, Hüb. V. 322, 1816. Chesias, p., Treit. (S. v. 2, 437, 1825). Id. vi. 1, 330, 1827.

1. EUCESTIA OBLIQUATA. The Chevron.

Geometra obliquata, Schiff. (W. V. 102, 1776).

Chesias obliquata, Step. H. iii. 270, 1831. Wood, I. E. t. 23, f. 633.
Phalæna rufata, Fab. M. I. ii. 202, 1787.

Phalæna Bombycata, Don. B. I. xi. 74, t. 386, f. 4, 1806.

EUCESTIA SPARTIATA. The Streak.
 Phalæna Spartiata, Herbst.—Fues. A. 33, t. 11, 1781. Don.
 B. I. x. 42, t. 342, f. 2, 1801.
 Chesias Spartiata, Step. H. iii. 270, 1831.

## 281. PHIBALAPTERYX.

Phibalapteryx, Step. (Cat. ii. 138, 1829). Id. H. iii. 255, 1831.

- a. Horisme, Hüb. V. 331, 1816.
- Phibalapteryx tersata. The Fern. B. M. Geometra tersata, Schiff. (W. V. 109, 1776).
   Phibalapteryx tersata, Step. H. iii. 256, 1831. Wood, I. E. t. 22, f. 612.
  - b. ORTHONAMA, Hüb. V. 331, 1816.
- PHIBALAPTERYX VITALBATA. The Small Waved Umber. B. M. Geometra Vitalbata, Schiff. (W. V. 109, 1776).
   Phibalapteryx Vitalbata, Step. H. iii. 257, 1831. Wood, I. E. t. 22, f. 613.
- 3. PHIBALAPTERYX LIGNATA. The Oblique Carpet.

  Geometra lignata, Hüb. Ge. t. 52, f. 270, 1799.
  Phibalapteryx lignata, Step. H. iii. 257, 1831.

  t. 22, f. 614.
  Geometra areolaria, Haw. (Pr. 23, 1802).
  Phalæna lineataria, Don. B. I. xiv. 47, t. 485, f. 1, 2, 1810.
  - с. Мезотуре, р., Hüb. V. 331, 1816.
- PHIBALAPTERYX POLYGRAMMATA. The Many Lined.
   Phalæna-G. polygrammata, Bork. E. S. v. 560, 1794.
   Phibalapteryx polygrammata, Step. H. iii. 256, 1831.
   Wood, I. E. t. 56, f. 1676.

## 282. PLEMYRIA.

Plemyria, Hüb. V. 334, 1816.

- 1. PLEMYRIA GEMMATA. The Narrow-barred Carpet. B. M. Geometra gemmata, Hilb. P. Ge. t. 55, f. 283, 1799.
- 3? Phalæna albicinctata, Haw. ? L. B. 344, 1810. Cidaria albicinctata, Step. H. iii. 200, 1831.
- Phalæna angustata, Haw. L. B. 340, 1810. Phibalapteryx angustata, Step. H. iii. 258, 1831. Wood, I. E. t. 22, f. 616.

# a. CŒNOCALPE, Hub. V. 330, 1816.

PLEMYRIA LAPIDATA.* The Slender-striped Rufous. B. M. Geometra lapidata, Hüb. Ge. t. 63, f. 324, 1802.
 Phalæna subrufata, Haw. L. B. 347, 1810.
 Macaria subrufata, Step. H. iii. 320, 1831. Wood, I. E. t. 26, f. 744.

## 283. PHILEREME.

Philereme, Hüb. V. 330, 1816. Scotosia, Step. (Cat. ii. 139, 1829). Id. H. iii. 259, 1831. Larentia, Cur. (G. 164, 1831).

- PHILEREME RHAMNATA. The Dark Umber.
   Geometra Rhamnata, Schiff. (W. V. 109, 1776).
   Scotosia Rhamnata, Step. H. iii. 260, 1831. West. & H. M. ii. 50, t. 66, f. 18, 1843.
   Phalæna-G. transversata, Hiifn.—(Berl. M. iv. 600, 1770).
   Phalæna clypeata, Schwar. R. K. 140, 1791.
- 2. PHILEREME VETULATA. The Brown Scallop.

  Geometra vetulata, Schiff. (W. V. 109, 1776).

  Scotosia vetulata, Step. H. iii. 260, 1831. Wood, I. E. t. 23, f. 619.

  Phalæna fuscata, Haw. (Pr. 27, 1802).

# 284. SCHIDAX.

Schidax, Hüb. V. 315, 1816.

1. SCHIDAX SPARSABIA. The Broom Scallop.

B. M.

Geometra Sparsaria, Hüb. Ge. t. 77, f. 398, 1807. Scotosia Sparsaria, Step. H. iii. 261, 1831. Wood, I. E. t. 23, f. 620.

#### 285. TRIPHOSA.

Triphosa, Step. (Cat. ii. 139, 1829). Id. H. iii. 261, 1831. Plerocymia, p., Hüb. V. 330, 1816.

1. TRIPHOSA CERTATA. The Scarce Tissue.

B. M.

Geometra certata, Hüb. (V. 330, 1816).
Acidalia certata, Treit. S. vi. 2, 72, 1828.
Geometra cervinata, Hüb. Ge. t. 51, f. 266, 1799.
Triphosa cervinata, Step. H. iii. 262, 1831. Wood, I. E. t. 23, f. 621.
Acidalia ancipitata, Treit. (S. v. 2, 440, 1825).

2. TRIPHOSA DUBITATA. The Tissue.

B. M.

Phalæna-G. dubitata, *Linn. F.* ii. No. 1259, 1761. Triphosa dubitata, *Step. H.* iii. 262, 1831. *Wood, I. E.* t. 23, f. 622.

Phalmna-G. fuliginata, *Hüfn.*—(*Berl. M.* iv. 610, 1770). Var. a. Scotosia cinereata, *Step. H.* iii. 263, 1831. Wood, *I. E.* t. 23, f. 623.

#### 286. CAMPTOGRAMMA.

Camptogramma, Step. H. iii. 264, 1831. Plerocymia, p., Hüb. V. 330, 1816.

1. CAMPTOGRAMMA BILINEATA. The Yellow Shell. B. M.
Phalæna-G. bilineata, Linn. S. Nat. i. 525, 1758. Wood, I.
E. t. 23, f. 624.
Camptogramma bilineata, Step. H. iii. 264, 1831.

#### 287. CALOCALPE.

Calocalpe, Hüb. V. 330, 1816. Eucosmia, Step. H. iii. 265, 1831.

1. CALOCALPE UNDULATA. The Scollop Shell. B. M. Phalæna-G. undulata, Linn. S. Nat. i. 524, 1758.

Eucosmia undulata, Step. H. iii. 265, 1831. Wood, I. E. t. 23, f. 625.

Phalæna-G. serrata, Hüfn.—(Berl. M. iv. 522, 1770).

## Sub-F. XVI. SIONIDI.

Sionidi, *Guén. ? MSS. ?* Sionites, *Dup. C.* 277, 1846.

## 288. SIONA.

Siona, Dup. L. F. viii. 112, 1829. Schistotege, p., Hüb. V. 336, 1816. Idaëa, Step. (Cat. ii. 136, 1829). Scoria (pro Siona) Step. H. iii. 344, 1831.

1. SIONA DEALBATA. The Black-veined.

B. M.

Phalæna-G. dealbata, *Linn. S. Nat.* ii. 870, 1767. Siona dealbata, *Step. H.* iii. 245, 1831. *Cur. B. E.* xv. t. 691, 1838.

#### 289. GYPSOCHROA.

Gypsochroa, Hüb. V. 336, 1816.

*1. GYPSOCHROA NIVEATA.* The Snowy.

Geometra niveata, Schiff.? (W. V. 116, 1776). Hub. Ge. t. 41, f. 217, 1799.

Phalæna-G. farinata, Hüfn.—(Berl. M. iv. 610, 1770). Larissa Clarkiata, Cur. ? (Ge. ii. 193, 1837).

# Sub-F. XVII. ZERENIDI.

Zerenidi, Guén. MSS. Zerenites, Dup. C. 266, 1846.

#### 290. ABRAXAS.

Abraxas, Leach, E. E. ix. 134, 1815. Zerene, Bois. I. M. 2 ed. 218, 1840.

## a. Rhyparia, Hüb. V. 305, 1816.

1. ABRANAS GROSSULARIATA. The Large Magpie.

B. M.

Phalæna-G. Grossulariata, Linn. S. Nat. i. 525, 1758. Abraxas Grossulariata, Step. H. iii. 247, 1831. West. & H. M. ii. 45, t. 65, f. 4, 1843.

Var. a. Abraxas Grossulariata, var., West. l. c. t. 65, f. 5.

Var. b. Abraxas Grossulariata, var., West. l. c. t. 65, f. 6.
Var. c. Abraxas Grossulariata, var., West. Ent. Text-Book, f. 5, 1838.

Var. d. Abraxas nigrata,* Step. MSS.

b. Calospilos, Hüb. V. 305, 1816.

2. ABRANAS PANTARIA. The Panther.

B. M.

Phalæna-G. pantaria, Linn. S. Nat. ii. 863, 1767. Abraxas pantaria, Step. H. iii. 246, t. 32, f. 1, 1831.

3. ABBANAS ULMATA. The Clouded Magpie.

B. M.

Phalæna Ulmata, Fab. S. E. 632, 1775.

Abraxas Ulmata, Step. H. iii. 246, 1831. West. & H. M. ii. 44, t. 65, f. 1, 2, 1843.

Phalæna sylvata, Scop. P. C. No. 546, 1763.

Geometra pantherata, Hüb. Beit. ii. 47, t. 2, f. N., 1787. Phalæna-G. pantherata, Bork. E. S. v. 470, 1796.

## 291. VENILIA.

Venilia, Dup. L. F. viii. 110, 1829. Pseudopanthera, p., Hüb. V. 295, 1816.

1. VENILIA MACULATA. 'The Speckled Yellow.

B. M.

Phalæna-G. maculata, *Linn. S. Nat.* i. 521, 1758. Venilia maculata, *Step. H.* iii. 304, 1831. *Wood, I. E.* t. 25, f. 710.

Var. a. Phalæna quadrimaculata, Hatchett.—Ent. Tr. i. 245, t. 7, f. 3, 1812.

Venilia 4-maculata, Step. H. iii. 304, 1831. Wood, l. c. f. 711.

#### 292. CORYCIA.

Corycia, Dup. L. F. viii. 110, 1829. Lomographa, p., Hüb. V. 311, 1816. Bapta, Step. (Cat. ii. 147, 1829). Id. H. iii. 294, 1831.

- a. ACIDALIA, †* Bois. I. E. 2 ed. 221, 1840.
- CORYCIA PUNCTATA. The Clouded Silver.
   Phalæna punctata, Fab. S. E. 637, 1775.
   Bapta punctata, Step. H. iii. 295, 1831. Wood, I. E. t. 25, f. 689.

Geometra temerata, Schiff. (W. V. 116, 1776). Phalæna nubeculata, Haw. L. B. 355, 1810.

- b. Cabera, + Bois. I. E. 2 ed. 218, 1840.
- 2. Corycia taminata. The White-pinion Spotted.

  Geometra taminata, Schiff. (W. V. 116, 1776).

  Phalæna bimaculata, Fab. M. I. 205, 1787.

  Bapta bimaculata, Step. H. iii. 294, 1831. Wood, I. E. t. 24, f. 688.

## Sub-F. XVIII. MELANTHIDI.

Melanthidi, Step. MSS. Melanthites, Dup. C. 263, 1846.

#### 293. MELANIPPE.

Melanippe, Dup. L. F. viii. 111, 1829. Eulype, p., Hüb. V. 328, 1816.

Melanippe Hastata. The Argent and Sable.
 Phalæna-G. hastata, Linn. S. Nat. i. 527, 1758.
 Melanippe hastata, Step. H. iii. 248, 1831. West. & H. M. ii. 45, t. 65, f. 10-12, 1843.

Var. a. Geometra hastulata, Hüb. Ge. t. 69, f. 356, 1805?
Melanippe hastulata, West. & H. l. c. f. 12.

#### 294. MELANTHIA.

Melanthia, Dup. L. F. viii. 111, 1829. Xerene, Step. (Cat. ii. 137, 1829). Harpalyce, p., Step. (Cat. ii. 133, 1829).

- a. EULYPE, p., Hüb. V. 299, 1816.
- Melanthia tristata. The Small Argent and Sable. B. M.
  Phalæna-G. tristata, Linn. S. Nat. i. 526, 1758.
  Harpalyce tristata, Step. H. iii. 223, 1831. Wood, I. E. t. 21, f. 566.

Phalæna contristata, Haw. (Pr. 25, 1802). Var. a. Geometra funerata, Hüb. Ge. t. 50, f. 1799.

b. Ерівкное, *Hüb. V.* 328, 1816. Melanippe, p., *Dup. C.* 265, 1846.

- Melanthia Alchemillata. The Common Carpet.
   Phalæna-G. Alchemillata, Linn. S. Nat. i. 526, 1758.
   Geometra Alchemillata, Hüb. Ge. t. 71, f. 370, 1805.
   Phalæna subtristata, Haw. (Pr. 25, 1802). Id. L. B. 332, 1810.
   Harpalyce subtristata, Step. H. iii. 223, 1831. Wood, I. E. t. 21, f. 567.
   Phalæna contristata, Don. B. I. xv. 12, t. 510, f. 2, 1811.
   Geometra aparinata, Hüb. (V. 328, 1816).
   Var. a. Phalæna degenerata, Haw. L. B. 333, 1810.
- 3. Melanthia rivata. The Wood Carpet. B. M. Geometra rivata, Hüb. Ge. t. 79, f. 409, 1807. Phalæna sylvaticata, Haw. L. B. 332, 1810. Harpalyce sylvaticata, Step. H. iii. 225, 1831. Wood, I. E. t. 21, f. 568.
- MELANTHIA AMNICULATA. The Sharp-angled Carpet. B. M. Geometra amniculata, Hüb. Ge. t. 75, f. 386, 1807. Phalæna unangulata, Haw. (Pr. 25, 1802). Id. L. B. 332, 1810.
   Harpalyce unangulata, Step. H. iii. 225, 1831. Wood, L. B. t. 21, f. 569.

#### 295. MESOLEUCA.

Mesoleuca, Hüb. V. 326, 1816. Zerene, Treit. (S. v. 2, 444, 1825).

a. Mesoleuca, Hüb. V. 326, 1816.

Xerene, Step. (Cat. ii. 137, 1829).

- 1. MESOLEUCA ADUSTATA. The Scorched Carpet. B. M. Geometra adustata, Schiff. (W. V. 114, 1776).

  Xerene adustata, Step. H. iii. 250, 1831. Wood, L. B. t. 22, f. 605.
- MESOLEUCA ALBICILLATA. The Beautiful Carpet.
   Phalæua-G. albicillata, Linn. S. Nat. i. 527, 1758.
   Xerene albicillata, Step. H. iii. 250, 1831. Wood, L. B. t. 22, f. 603.
   Phalæna vestalis, Walsh.—Naturf. xiii. 30, t. 3, f. 7, 1786.
- 3. MESOLEUCA PROCELLATA. The Chalk Carpet. B. M. Geometra procellata, Schiff. (W. V. 114, 1776). Xerene procellata, Step. H. iii. 250, 1831. Phalæna procellata, Don. B. I. vi. 53, t. 502, f. 3, 1797.
  - b. PLEMYRIA, p., Hüb. V. 327, 1816.
- MESOLEUCA RUBIGINATA. The Blue-bordered Carpet. B. M. Geometra rubiginata, Schiff. (W. V. 114, 1776).
   Xerene rubiginata, Step. H. iii. 251, 1831. Wood, I. E. t. 22, f. 606.
   Phalæna-G. bicolorata, Hüfn.—(Berl. M. iv. 608, 1770).
   Phalæna abbreviata, Haw. (Pr. 25, 1802).

Var. a. Phalæna trigonata, Haw. (Pr. 24, 1802).

Var. b. Zerene plumbata, Cur. G. 163, 1831. Id. B. E. xiv. t. 643, 1837.

Xerene plumbata, Step. H. iii. 251, 1831. Xerene contaminata, Step. (Cat. ii. No. 6597, 1829). Geometra vitiosata, Frey. N. B. i. 116, t. 60, f. 3, 1833.

#### 296. EMMELESIA.

Emmelesia, Step. (Cat. ii. 147, 1829). Id. H. iii. 296, 1831. Melanippe, p., Bois. C. 215, 1840.

## a. Calostigia, Hüb. V. 328, 1816.

1. EMMELESIA RIVULATA. The Rivulet.

B. M.

Geometra rivulata, Schiff. (W. V. 109, 1776). Hüb. Ge. t. 50, f. 259, 1799.

Phalæna nassata, Fab. M. ii. 212, 1787.

Phalæna Alchemillata, Haw. L. B. 335, 1810.

Emmelesia affinitata, Step. H. iii. 297, 1831. Wood, I. E. t. 25, f. 693.

Var. a. Emmelesia turbaria, Step. H. iii. 298, 1831. Wood, I. E. t. 25, f. 694.

2. EMMELESIA HYDRATA. The Small Rivulet.

B. M.

Geometra hydrata, Frey. N. B. i. 106, t. 54, f. 1, 1833. Phalæna nassata, Haw. L. B. 335, 1810.

Emmelesia rivulata, Step. H. iii. 298, 1831. Wood, I. E. t. 25, f. 695.

Emmelesia? Silenata, Guén. MSS.

# b. Твіснортевух, р., Hüb. V. 323, 1816.

3. Emmelesia decolorata, Hüb. Ge. t. 47, f. 243, 1799. Emmelesia decolorata, Step. H. iii, 297, 1831. Wood, I. E. t.

# c. Perizoma, Hüb. V. 327, 1816.

4. EMMELESIA ALBULATA. The Grass Rivulet.

25, f. 692.

B. M.

Geometra albulata, Schiff. (W. V. 109, 1776). Emmelesia albulata, Step. H. iii. 299, 1831. Wood, I. E. t. 25. f. 698.

Var. a. Cleogone niveata, Wood, I. E. t. 24, f. 684.

Emmelesia Blandiata. The Pretty Pinion.
 Geometra blandiata, Schiff. (W. V. 109, 1776).

B. M.

Emmelesia blandiata, Step. H. iii. 299, 1831. Wood, I. E. t. 25, f. 697.

Var. a. Emmelesia trigonata, Step. H. iii. 299, 1831. Wood, L. e. f. 699.

- Emmelesia ericetata, Dale.—Cur. (G. 164, 1831).
   iii. 298, 1831. Wood, I. E. t. 25, f. 696.
   Var.? a. Emmelesia Monticola, Cur. (G. 164, 1831).
- 7. Emmelesia tæniata. The Barred Rivulet. B. M. Emmelesia tæniata, Step. H. iii. 299, t. 32, f. 3, 1831.
- 8. Emmelesia Bipasciata, The Double-barred Rivulet. B. M. Phalæna bifasciata, Haw. L. B, 334, 1810. Emmelesia bifasciata, Step. H. iii. 300, 1831. Wood, I. E. t. 25, f. 702.
- Emmelesia unifasciata, Haw. L. B. 335, 1810.
   Emmelesia unifasciata, Step. H. iii. 300, 1831. Wood, I. E. t. 25, f. 701.

#### 297. COSMORHOE.

Cosmorhoë, Hüb. V. 322, 1816.

1. Совмовное Rusticata. The Least Carpet. B. M. Geometra rusticata, Schiff. (W. V. 113, 1776). Emmelesia rusticata, Step. H. iii. 300, 1831. Wood, I. E. t. 25, f. 703.

## 298. HYRIA.

Hyria, Step. (Cat. ii. 150, 1829). Id. H. iii. 292, 1831. Eois, p., Hüb. V. 308, 1816.

1. HYRIA AURORALIS. The Purple-bordered Gold.

Pyralis auroralis, Schiff. (W. V. 124, 1776).

Phalæna-G. muricata, Hüfn.—(Berl. M. iv. 606, 1770).

Phalæna variegata, Fab. M. ii. 212, 1787.

Geometra sanguinaria, Hüb. Beit. i. 21, t. 3, f. S. 1788.

Geometra auroraria, Hüb. Ge. t. 12, f. 63, 1796. Hyria auroraria, Step. H. iii. 292, 1831. Wood, I. E. t. 24, f. 685.

#### 299. MINOA.

Minoa, Treit. (S. v. 2, 446, 1825). Id. vi. 2, 248, 1828. Baptria, p., Hüb. V. 306, 1816.

MINOA EUPHORBIATA. The Drab Looper.
 Geometra Euphorbiata, Schiff. (W. V. 116, 1776).
 Minoa Euphorbiata, Step. H. iii. 293, 1831. Wood, I. E. t. 24, f. 687.
 Phalæna murinata, Scop. C. No. 572, 1763.
 Phalæna-G. fuscata, Hifn.—(Berl. M. iv. 524, 1770).

# 300. ODEZIA.

Odezia, *Bois. I. M.* 2 ed. 229, 1840. Tanagra (Genus Avium), *Dup. L. F.* viii. 112, 1829. Baptria, p., *Hüb.* (V. 306, 1816).

Phalæna sordiata, Haw. (Pr. 26, 1802).

ODEZIA CHÆROPHYLLATA. The Chimney-sweeper.
 Phalæna-G. Chærophyllata, Linn. S. Nat. ii. 866, 1767.
 Minoa Chærophyllata, Step. H. iii. 293, 1831. Wood, I. E. t. 24, f. 686.
 Phalæna-G. atrata, Linn. S. Nat. i. 524, 1758.

# Sub-F. XVIII. ACIDALIDI.

Acidalidi, Guén. MSS. Acidalites, Dup. C. 271, 1846.

#### 301. LOMASPILIS.

Lomaspilis, Hüb. V. 306, 1816. Pœcilophasia, Step. H. iii. 314, 1831. Abraxas, p., Cur. (G. 162, 1831).

1. Lomaspilis marginata. The Clouded Border. B. M. Phalæna marginata, Linn. S. Nat. i. 527, 1758.

Pœcilophasia marginata, Step. H. iii. 314, 1831. Wood, I. E. t. 26, f. 733.

Phalæua Staphyleata, Scop. C. No. 548, 1763.

Var. a. Geometra maculata, Hüb. Beit. i. 24, t. 3, f. P., 1789. Geometra nævaria, Hüb. Ge. t. 15, f. 79, 1796. Pocilophasia marginata, var., West. & H. M. ii. 77, t. 73, f. 12, 1843.

Var. b. Phalæna-G. hortulata, Sulz. Ken. 38, t. 16, f. 96, 1761.

Var. c. Geometra polutaria, Hub. Ge. t. 15, f. 77, 1796.

## 302. PTYCHOPODA.

Ptychopoda, Step. (Cat. iii. 150, 1829). Id. H. iii. 305, 1831. Acidalia, Cur. B. E. fo. 384, 1831. Dosithea, Dup. L. F. viii. 108, 1829.

# a. CRASPEDIA, Hub. V. 312, 1816.

1. PTYCHOPODA REVERSATA. The Small Fan-footed Wave, B. M.

Idæa reversata, Treit. S. vi. 2, 286, 1828. Phalæna dilutata, Haw. L. B. 353, 1810.

Dosythea scutularia, Dup. L. F. ix. 55, t. 174, f. 2, 1830. Ptychopoda dilutaria, Step. H. iii. 305, 1831. Wood, I. E. t. 25, f. 712.

Var. a. Ptychopoda fimbriolata, Step. H. iii. 306, 1831. Wood, L.c. f. 713.

Var. b. Ptychopoda cinereata, Step. H. iii. 306, 1831. Wood, l. c. f. 714.

------? decoraria? Step. (Cat. ii. 6712, 1829).

2. PTYCHOPODA BISETATA. The Treble Brown Spot. B. M. Phalæna bisetata, Hüfn.—(Berl. M. iv. 618, 1770).

Phalwna bisetata, Hufn.—(Berl. M. iv. 618, 1770). Ptychopoda bisetata, Step. H. iii. 307, 1831. Wood, I. E. t. 25, f. 716.

Geometra scutularia, var., Hüb. Ge. t. 14, f. 73, 1796. Phalæna trigeminata, Haw. L. B. 354, 1810.

3. PTYCHOPODA SCUTULATA. The Single Dotted Wave. B. M.

Geometra scutulata, Schiff. (W. V. 117, 1776). Phalwna-G. dimidiata, Hüfn.—(Berl. M. iv. 602, 1770). Phalwna scutata, Fab. M. I. ii. 211, 1787.

Phalæna lividata, Haw. L. B. 353, 1810.

Ptychopoda lividata, Step. H. iii. 306, 1831. Wood, I. E. t. 25, f. 715.

Dosythea scutularia, Dup. L. F. ix. 556, t. 210, f. 4, 1830.

4. PTYCHOPODA ORNATA. The Lace Border.

B. M.

Geometra ornata, Schiff. (W. V. 117, 1776).

Ptychopoda ornata, Step. H. iii. 307, 1831. Wood, I. E. t. 25, f. 717.

Geometra ornataria, Esp. S. v. t. 51, f. 2—4, 1796.

Phalæna-G. institiata, Hüfn.—(Berl. M. iv. 526, 1770).

b. Arrhostia, p., Hüb. V. 311, 1816.

Phalæna-G. paludata, Vill. E. ii. 355, 1789.

5. PTYCHOPODA IMMUTARIA. The Mullein Wave. B. M.

Geometra immutaria, Hüb. Ge. t. 20, f. 108, 1797. Phalæna incanata, Haw. L. B. 350, 1810. Ptychopoda incanata, Step. H. iii. 307, 1831. Wood, I. E. t. 25, f. 718.

Var. a. Phalæna contiguaria, Haw. L. B. 350, 1810.
Ptychopoda contiguaria, Step. H. iii. 308, 1831. Wood, I. E. 1. 25, f. 719.

- c. Leptomeris, p.? Hüb. P V. 311, 1816.
- 6. PTYCHOPODA VIRGULARIA. The Small Dusty Wave. B. M. Geometra virgularia, Hüb.? Ge. t. 19, f. 104, 1797. Acidalia virgularia, Step. H. iii. 310, 1831. Wood, I. E. t. 26, f. 725.

#### 303. EMMILTIS.

Emmiltis, Hüb. V. 309, 1816. Ptychopoda? Step. H. iii. 309, 1831.

Emmiltis Rubricata. The Tawny Wave.
 Geometra rubricata, Schiff. (W. V. 110, 1776).
 Ptychopoda? rubricata, Step. H. iii. 308, t. 31, f. 1, 1831.
 Phalæna-G. rubriginata, Húfn.—(Berl. M. iv. 610, 1770).

#### 304. ACIDALIA.

Acidalia, Treit. (S. v. 2, 438, 1825). Id. vi. 2, 5, 1828. Cymatida, Sodoff.—(Bull. S. I. Mosc. 18, 1837).

- a. LEPTOMERIS, p., Hüb. V. 311, 1816.
- Acidalia osseata, Schiff. (W. V. 110, 1776).
   Acidalia osseata, Step. H. iii. 309, 1831. Wood, I. E. t. 25,

f. 723. Geometra ossearia, Hüb. Ge. t. 19, f. 102, 1797. Var. a. Ptychopoda subochreata, Step. (Cat. ii. No. 6708, 1829).

- 2. Acidalia marginepunctata.* The Dotted-bordered Cream Ptychopoda marginepunctata, Step. (Cat. ii. 6709, 1829). Acidalia marginepunctata, Step. H. iii. 310, 1831. West. & H. M. ii. 75, t. 73, f. 2, 1843.
- Acidalia Obsoletaria, Ramb. F. A. (teste Bois. C. 224, 1840).
   Acidalia obsoletaria, Dup. L. F. Supp. iv. 52, t. 54, f. 10, 1842.
  - b. Arrhostia, p., Hüb. V. 311, 1816.
- Acidalia perochraria, Tisher.—Fis. v. R. 125, t. 49, 1834.
   Acidalia pallidaria, Cur. B. E. viii. fo. 384, 1831.
- Acidalia holosericearia, Parr. -Dup. L. F. Supp. iv. 109, t. 59, f. 7, 1842.
- 6. Acidalia subsericeata, The Satin Wave. B. M. Phalæna subsericeata, Haw. L. B. 352, 1810. Acidalia subsericeata, Step. H. iii. 310, 1831. Wood, I. E. t. 25. f. 726.
- 7. ACIDALIA INORNATA. The Plain Wave. B. M. Phalæna inornata, Haw. L. B. 349, 1810.

Acidalia inornata, Step. H. iii. 311, 1831. Wood, I. E. t. 25, f. 727.

Idæa suffúsata, Treit. P. S. vi. 2, 272, 1828.

Acidalia maritimata, Guén.—(teste Doub. List, 20, 1850).

- ACIDALIA DEGENRBARIA.* The Portland Ribbon Wave. B. M. Geometra degeneraria, Hüb. Ge. t. 11, f. 57, 1796.
   Acidalia degeneraria, Cur. B. E. viii. t. 384, 1831. Step. H. iv. 394, 1835.
- Acidalia aversata, The Ribband Wave.
   B. M. Phalæna-G. aversata, Linn. S. Nat. i. 526, 1758.
   Acidalia aversata, Step. H. iii. 311, 1831. Wood, I. E. t. 26, f. 728.
- Var. a. Phalæna-G. lividata, Linn. S. Nat. i. 526, 1758.
- Var. b. Phalæna remutata, Haw. L. B. 349, 1810.
   Acidalia remutata, Step. H. iii. 312, 1831. Wood, I. E. t. 26, f. 729.
- Var.? c. Phalæna fuliginata, Haw.? L. B. 350, 1810. Acidalia fuliginata, Step. H. iii. 312, 1831.
  - c. Asthena, p., Hüb. V. 310, 1816.
- Acidalia Remutata. The Cream Wave.
   Phalæna-G. remutata, Linn. ? S. Nat. i. 528, 1758.
   Phalæna-G. trilineata, Hüfn.—(Berl. M. iv. 606, 1770).
   Phalæna floslactata, Haw. L. B. 351, 1810.
   Acidalia floslactata, Step. H. iii. 313, 1831. Wood, I. E. t. 26, f. 732.
- Var. a. Phalæna nemorata, Haw. (Pr. 27, 1802).
  Phalæna lactata, Haw. L. B. 351, 1810.
  Acidalia lactata, Step. H. iii. 313, 1831. Wood, I. E. t. 26, f. 731.
- Var. b. Phalæna sublactata, Haw. L. B. 351, 1810.
- Acidalia cæspitaria, Bois. I. M. 2 ed. 225, 1840.
   Phalæna immutaria, Haw. L. B. 352, 1810.
   Acidalia immutaria, Step. H. iii. 308, 1831. Wood, I. E. t. 25, f. 721.
   Geometra sylvestraria, Frey. N. B. i. 142, t. 77, f. 2, 3, 1834.

12. ACIDALIA FUMATA. The Smoky Wave.

B. M.

Acidalia fumata, Dale?—Step. H. iii. 312, 1831. Wood, I. E. t. 26, f. 730, 1835.

Acidalia nitidaria, Bois. I. M. 2 ed. 227, 1840.

d. STRENIA, p., Bois. I. M. 2 ed. 227, 1840.

*13. ACIDALIA IMMORATA.* The Barred Wave.

Phalæna-G. immorata, Linn. S. Nat. i. 528, 1728. Schiff. (W. V. 107, 1776).

Geometra immoraria, Hüb. Ge. t. 25, f. 133, 1797.

Phalæna-G. grammaria, Hüfn.—(Berl. M. iv. 614, 1770).

Phalæna-G. festucaria, Brahm. I. K. ii. 321, 1791.

## 305. STRENIA.

Strenia, Dup. L. F. viii. 112, 1829. Chiasmia, p., Hüb. V. 293, 1816. Hercyna, Step. (Cat. ii. 149, 1829).

1. STRENIA CLATHRATA. The Latticed Heath.

B. M.

Phalæna-G. clathrata, *Linn. S. Nat.* i. 524, 1758. Strenia clathrata, *Step. H.* iii. 302, 1831. *Wood*, *I. E.* t. 25, f. 709.

Phalæna retialis, Scop. C. No. 536, 1763.

Var. a. Geometra cancellaria, Hub. Ge. t. 62, f. 322, 1801.

Var. b. Phalæna radiata, Haw. L. B. 348, 1810. Var. c. Phalæna retata, Haw. L. B. 348, 1810.

306. EUCHŒCA.

Euchœca, Hüb. V. 298, 1816. Eupisteria, p., Bois. I. M. 2 ed. 192, 1840. Fidonia, p., Dup. Cat. 240, 1846.

1. EUCHŒCA HEPARATA. The Dingy Shell.

B. M.

Geometra heparata, Schiff. (W. V. 116, 1776). Emmelesia? heparata, Step. H. iii. 302, 1831. Wood, I. E. t. 25, f. 708.

307. HYDRELIA.

Hydrelia, Hüb. V. 322, 1816.

1. HYDRELIA SYLVATA. The Waved Carpet.

B. M.

Geometra sylvata, Schiff. (W. V. 109, 1776). Emmelesia? sylvata, Step. H. iii. 300, 1831. Wood, I. E. t. 25, 704.

Phalæna testaceata, Don. B. I. xiv. 51, t. 487, f. 1, 1810.

2. HYDRELIA BLOMERI. Blomer's Rivulet.

B. M.

Melanippe Blomeri, Cur. B. E. ix. t. 416, 1832. Emmelesia? Blomeri, Step. H. iv. 393, 1835. Geometra pulchraria, Evers.—Bull. S. I. Mosc. iii. 557, t. 6, f. 9, 1842.

## 308. ASTHENA?

Asthena? Hüb. V. 310, 1816.

1. ASTHENA? LUTEATA. The Small Yellow Wave.

B. M.

Geometra luteata, Schiff. (W. V. 110, 1776). Emmelesia? luteata, Step. H. iii. 301, 1831. Wood, I. E. t. 25, f. 707.

Phalæna centrata, Fab. G. Mant. 290, 1777. Phalæna flavostrigata, Don. B. I. xi. 73, t. 386, f. 1, 2, 1802.

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ASTHENA? CANDIDATA. The Small White Wave.
 Geometra candidata, Schiff. (W. V. 110, 1776).
 Emmelesia? candidata, Step. H. iii. 301, 1831.
 Wood, I. E. t. 25, f. 706.

Phalæna-G. albulata, *Hüfn.*—(*Berl. M.* iv. 327, 1770). Phalæna immutata, *Fab. S. E.* 637, 1775.

# Sub-F. XIX. TIMANDRIDI.

Timandridi, Step. MSS.

## 309. NEMORIA.

Nemoria, Hüb. V. 285, 1816. Chlorissa, p., Step. H. iii. 315, 1831.

Nemobia viridata. The Small Grass Emerald.
 Phalæna-G. viridata, Linn. S. Nat. i. 523, 1758.

Chlorissa viridata, Step. H. iii. 316, 1831. Wood, I. E. t. 26, f. 734.

Geometra vernaria, Haw. L. B. 300, 1810.

*2. Nemoria Cloraria. The Middle Grass Emerald. B. M. Geometra cloraria, Hüb.? Ge. t. 68, f. 352, 1804. Hemithea cloraria, Dup.? L. F. ix. 549, t. 210, f. 1, 1830. Chlorissa cloraria, Step. H. iii. 316, 1831. Wood, I. E. t. 26, f. 735.

## 310. THALERA.

Thalera, Hüb. V. 285, 1816. Chlorissa, p., Step. H. iii. 315, 1831.

## a. Thalera, Hüb. ut supra.

1. THALERA ÆSTIVARIA. The Common Emerald. B. M. Geometra Æstivaria, Hüb. Beit. i. 22, t. 3, f. R, 1786. Esp.

Geometra Astivaria, Hub. Bett. 1. 22, t. 3, 1. K, 1786. Es S. v. 24, t. 2, f. 1, 2, 1794.

Phalæna-G. fimbriata, Hüfn.—(Berl. M. iv. 604, 1770). Phalæna vernaria, Fab. S. E. 620, 1775. Don. B. I. x. 47, t. 310, 1801.

Phalæna-G. strigata, Vill. E. ii. 611, 1789.

Geometra bajularia, Lang. V. 2, 174, 1791.

Phalæna-G. Thymiaria, Linn. P. S. Nat. ii. 859, 1767?

Chlorissa Thymiaria, Step. H. iii. 316, 1831.

Var. a. Ptychopoda vernaria, Step. (Cat. ii. No. 6734, 1829).

b. Jodis, p., Hüb. V. 286, 1816.

2. THALERA PUTATA. The Little Emerald.

B. M.

Phalæna-G. putata, Linn. S. Nat. i. 523, 1758. Phalæna-G. putataria, Linn. F. No. 1225, 1761. Chlorissa? putataria, Step. H. iii. 317, 1831. Wood, I. E. t. 26, f. 737.

Geometra lactearia? Haw. (Pr. 21, 1802).

### 311. TIMANDRA.

Timandra, Dup. L. F. viii. 105, 1829. Calothysanis, p., Hüb. V. 301, 1816.

- 1. TIMANDRA INITARIA. The Small Blood-vein.
- B. M.

Geometra imitaria, Hüb. Ge. t. 10, f. 21, 1796. Timandra imitaria, Step. H. iii. 318, 1831. Wood, I. E. t. 26, f. 738.

2. TIMANDRA EXEMPTARIA. The Subangled Wave. Geometra exemptaria, Hüb. (V. 301, 1816).

B. M.

Wood, I. E. t.

Phalæna variegata, Scop. ? C. No. 553, 1763. Timandra variegata, Step. H. iii. 318, 1831. 26, f. 739. Geometra strigilata, Schiff. (W. V. 117, 1776). Phalæna mediata, Fab. ? M. I. 209, 1787.

Acidalia prataria, Bois. I. M. 2 ed. 227, 1840.

3. TIMANDRA EMUTARIA. The Dusky Wave.

B. M.

Geometra emutaria, Hüb. Ge. t. 63, f. 323, 1801. Timandra emutaria, Step. H. iii. 318, 1831. Wood, I. E. t. 26, f. 740.

Var. a. Phalæna subroseata, Haw. L. B. 351, 1810. Step. H. iii. 319, 1831.

### 312. MACARIA.

Macaria, Cur. B. E. iii. fo. 132, 1826. Semiothisa, p., Hüb. V. 298, 1816.

1. MACARIA NOTATA. The Peacock.

320, 1831.

B. M.

Phalæna-G. notata, Linn. S. Nat. i. 523, 1758. Macaria notata, Step. H. iii. 319, 1831. Wood, I. E. t. 26, f. 742. Phalæna-G. exustata, Hüfn.—(Berl. M. iv. 600, 1770).

- 2. MACARIA ALTERNATA. The Sharp-angled Peacock. B. M. Geometra alternata, Schiff. (W. V. 106, 1776). Macaria alternata, Step. H. iii. 320, 1831. Wood, I. E. t. 26. f. 743. Phalæna prænotata, Haw. L. B. 346, 1810.
- 3. Macaria Liturata. The Tawny-barred Angle. B. M. Phalæna-G. liturata, Linn. F. ii. No. 1272, 1761. Macaria liturata, Cur. B. E. iii. t. 132, 1826. Step. H. iii.

Phalæna-G. igneata, Hüfn.—(Berl. M. iv. 612, 1770). Phalæna obscurata, Haw. (Pr. 27, 1802). Var.? a. Phalæna præatomata, Haw. L. B. 345, 1810. Macaria præatomata, Step. H. iii. 321, 1831.

### 313. ANIA.

Ania, Step. H. iii. 321, 1831. Cepphis, p., Hüb. V. 294, 1816.

1. ANIA EMARGINATA. The Small Scallop.

ANIA EMARGINATA. The Small Scallop.
 Phalæna-G. emarginata, Linn. S. Nat. i. 524, 1758.
 Ania emarginata, Step. H. iii. 322, 1831.
 Phalæna-G. erosata, Hüfn.—(Berl. M. iv. 526, 1770).
 Phalæna demandata, Fab. S. E. 630, 1775.
 Phalæna quadripunctata, Don. B. I. xiv. 68, t. 493, f. 3, 1810.
 Phalæna dimidiata, Haw. L. B. 347, 1810.

Phalæna rumigerata, Don. B. I. xiv. 67, t. 493, f. 2, 1810.

### 314. ENNOMOS.

Ennomos, t., Treit. (S. v. 2, 427, 1825). Id. vi. 1, 4, 1827. Colposia, Hüb. V. 287, 1816. Aventia, Dup. L. F. viii. 105, 1829.

Ennomos flexula. The Beautiful Hooktip.
 Phalæna flexula, Fab. M. I. ii. 197, 1787.
 Ennomos flexula, Step. H. iii. 323, 1831. Wood, I. E. t. 26, f. 750.
 Phalæna sinuata, Fab. G. I. M. 287, 1777.

# Fam. II. PLATYPTERICIDÆ.

Platyptericidæ, Step. H. iv. 3, 1834.

## 315. PLATYPTERYX.

Platypteryx, Lasp. Pl. 27, 1803. Prionia, Hüb. V. 150, 1816. 1. PLATYPTERYX LACERTINABIA. The Scalloped Hooktip. B. M.

Phalæna-G. lacertinaria, Linn. S. Nat. i. 519, 1758.

Geometra lacertula, Schiff. (W. V. 64, 1776).

Platypteryx lacertula, Step. H. iv. 4, 1834. Wood, I. E. t. 26, f. 751.

Geometra dentaria, Thunb. I. S. 5, 1784.

3. Bombyx Scincula, Hüb. Bo. t. 12, f. 50, 1798?

2. Bombyx Lacertula, Hüb. Bo. t. 12, f. 49, 1798?

Var. a. Falcaria curvula, Haw. L. B. 154, 1810.

Var. b. Platypteryx cultraria, Leach, (E. E. ix. 134, 1815). Step. H. iv. 5, 1834. Wood, I. E. t. 26, f. 752.

## 316. DREPANA.

Drepana, Schr. F. B. ii. 2, 155, 1802.

## a. Syssaura, Hüb. V. 150, 1816.

- DREPANA FALCATARIA. The Pebble Hooktip.
   Phalæna-G. falcataria, Linn. S. Nat. i. 519, 1758.
   Drepana falcataria, Step. H. iv. 6, 1834. West. & H. M. ii. 83, t. 74, f. 4, 5, 1843.
   Geometra falcula, Schiff. (W. V. 64, 1776).
- DREPANA SICULA.* The Scarce Pebble Hooktip.
   Geometra sicula, Schiff. (W. V. 64, 1776).
   Bombyx sicula, Hüb. Bo. t. 11, f. 41, 1797.
   Bombyx harpagula, Esp. S. iii. 373, t. 73, f. 1, 2, 1785?

# b. DREPANIA, Hüb. V. 149, 1816.

3. DREPANA HAMULA. The Oak Hooktip.

Geometra hamula, Schiff. (W. V. 64, 1776).

Drapana hamula, Step H in 7, 1824 Wood I. F.

Drepana hamula, Step. H. iv. 7, 1834. Wood, I. E. t. 26, f. 754.

Phalæna-G. binaria, Hüfn.—(Berl. M. iv. 516, 1770). Phalæna falcata, Fab. S. E. 629, 1775.

Phalæna-G. falculataria, Vill. E. ii. 301, t. 6, f. 1, 1789.

Var. a. Phalæna-B. uncinula, Bork. E. S. iii. 461, 1790. Var. b. Bombyx uncula, Hüb. P Bo. t. 12, f. 45, Q, 1797.

Drepana uncula, Wood, I. E. t. 26, f. 755.

B. M.

# 4. DREPANA UNGUICULA. The Barred Hooktip.

B. M.

Bombyx unguicula, Hüb. Bo. t. 12, f. 48, 1797.
Drepana unguicula, Step. H. iv. 7, 1834. Wood, I. E. t. 26, f. 756.
Phalæna cultraria, Fab. ? S. E. 621, 1775.
Bombyx sicula, Esp. S. iii. 378, t. 74, f. 4—7, 1785?

### 317. CILIX.

Cilix, Leach, E. E. ix. 134, 1815. Euclea, Hüb. V. 149, 1816.

## 1. CILIX SPINULA. The Chinese Character.

B. M.

Geometra spinula, Schiff. (W. V. 64, 1776).
Bombyx compressa, Fab. G. I. M. 279, 1777.
Cilix compressa, Step. H. iv. 9, 1834. Wood, I. E. t. 26, f. 757.
Phalæna glaucata, Scop. P. C. No. 549, 1763.
Phalæna-A. ruffa, Linn. P. S. N. ii. 1068, 1761.
Geometra modesta, Walsh.—Naturf. xiii. 27, t. 3, f. 4, 1786.
(Vide Pyralis Bankiana, Fab. S. E. 645, 1775).

# Fam. III. PYRALIDÆ.

Pyralidæ, Leach, E. E. ix. 135, 1815.

# Sub-F. I. HERMINIDI.

Herminidi, Step. MSS. Herminites, Dup. C. 211, 1846.

### 318. HYPENA.

Hypena, Schr. F. B. ii. 2, 163, 1802. Herminia, Latr. H. N. iii. 413, 1802. Pogonitis, Sodoff.—(Bull. S. I. Mosc. 18, 1837).

# a. MACROCHILO, p., Hüb. V. 345, 1816.

## 1. HYPENA PROBOSCIDALIS. The Snout.

B. M.

Phalæna-P. proboscidalis, *Linn. S. Nat.* i. 533, 1758. Hypena proboscidalis, *Step. H.* iv. 11, 1834. *West. & H. M.* ii. 85, t. 74, f. 9, 10, 1843. Phalæna ensalis, *Fab. E. S.* iii. 2, 221, 1794.

## b. Hypena, Hüb. V. 345, 1816.

2. HYPENA ROSTRALIS. The Buttoned Snout.

B. M.

B. M.

Phalæna-P. rostralis, Linn. S. Nat. i. 533, 1758. Hypena rostralis, Step. H. iv. 12, 1834. Wood, 1. E. t. 27, f. 761.

Var. a. Phalæna palpalis, Fab. S. E. 642, 1775.
Crambus palpatus, Haw.? L. B. 366, 1810.
Hypena palpalis, Step. H. iv. 12, 1834.
Var. b. Crambus vittatus, Haw. L. B. 367, 1810.
Var. c. Pyralis tinealis, Schiff. (W. V. 119, 1776).

Aber.? Pyralis radiatalis, Hub. P. Py. t. 20, f. 134.

c. Bomolocha, Hüb. V. 343, 1816.

3. Hypena crassalis. The Beautiful Snout. B. M. Phalæna crassalis, Fab. M. I. ii. 217, 1787. Hypena crassalis, Cur. B. E. vi. t. 288, 1829. Step H. iv. 13, 1834.

Var. a. Pyralis Achatalis, Hüb. Py. t. 2, f. 12; t. 27, f. 172, 1796.

### 319. MACROCHILA.

Macrochila, Hüb. V. 345, 1816. Polypogon, Step. (Cat. ii. 158, 1829).

MACROCHILA CRIBBALIS. The Dotted Fan-foot.
 Pyralis cribralis, Hüb. Py. t. 1, f. 2, 1796.
 Macrochila cribralis, Step. H. iv. 14, 1834, 2.
 Pyralis cribralis, Cur. B. E. xi. t. 527, 1834, 12.

### 320. POLYPOGON.

Polypogon, Schr. F. B. ii. 2, 161, 1802.

Herminia, Latr. G. iv. 228, 1809. Pechipogon, Hüb. V. 344, 1816.

1. Polypogon Barbalis. The Common Fan-foot.

B. M.

Phalæna-P. barbalis, Linn. F. ii. No. 1345, 1763. Pechipogon barbalis, Step. H. iv. 15, 1834. Wood, I. E. t. 27, f. 764. Pyralis pectitalis, Hüb. Py. t. 19, f. 122, 1797.

321. PARACOLAX.

Paracolax, Hüb. V. 344, 1816.

1. PARACOLAX TARSICRINALIS. The Fan-foot.

B. M.

Pyralis tarsicrinalis, Hüb. Py. t. 1, f. 5, 1796.
Paracolax tarsicrinalis, Step. H. iv. 17, 1834. Wood, I. E. t. 27, f. 767.
Pyralis tentaculalis, Haw. (Pr. 29, 1802).
Paracolax barbalis, Hüb. (V. 344, 1816).

2. PARACOLAX NEMORALIS. The Small Fan-foot.

B. M.

Phalæna nemoralis, Fab. S. E. 642, 1775.

Paracolax nemoralis, Step. H. iv. 16, 1834. Wood, I. E. t. 27, f. 766.

Pyralis grisealis, Schiff. (W. V. 120, 1776).

3. PARACOLAN DERIVALIS. The Clay Fan-foot.

B. M.

Pyralis derivalis, Hüb. Py. t. 3, f. 19, 1796. Paracolax derivalis, Step. H. iv. t. 33, f. 2, 1834.

322. COLOBOCHYLA.

Colobochyla, Hüb. V. 344, 1816. Madopa, Step. (Cat. ii. 159, 1829).

1. COLOBOCHYLA SALICALIS. The Lesser Belle.

B. M.

Pyralis Salicalis, Schiff. W. V. 285, t. 1a, f. 5. Colobochyla Salicalis, Step. H. iv. 18, 1834. Wood, I. E. t. 27, f. 769. Phalæna obliquata, Fab. E. S. iii. 2, 185, 1794.

## Sub-F. II. CLEDEOBIDI.

Cledeobidi, Step. MSS. Cledeobites, Dup. C. 209, 1846.

### 323. SYNAPHA.

Synapha, Hüb. V. 347, 1816. Cledeobia, Guén. MSS.? Botys, t., Latr. H. N. iii. 414, 1802.

1. SYNAPHA ANGUSTALIS. The Small Snout.

B. M.

Pyralis augustalis, Schiff. (W. V. 120, 1776). Cledeobia augustalis, Step. H. iv. 19, 1834. Wood, I. E. t. 27, 770.

Phalæna erigalis, Fab. E. S. iii. 2, 237, 1794.

Q. Pyralis curtalis, Schiff. (W. V. 120, 1776).
 Pyralis rufescalis, Haw. (Pr. 30? 1802).
 Pyralis Bombycalis, Hüb. Py. t. 19, f. 123, 1796.

### 324. CLEDEOBIA.

Cledeobia, Step. (Cat. ii. 159, 1829). Id. H. iv. 19, 1834. Hypenodes, Guén. MSS.

1. CLEDEOBIA ALBISTRIGALIS. The White-line Snout. B. M.

Crambus albistrigalis, Haw. L. B. 368, 1810.

Cledeobia albistrigalis, Step. H. iv. 20, 1834. Wood, I. E. t. 27, f. 771.

Hypenodes nolalis, Guen.—teste Doub. (List, 14, 1850).

2. CLEDEOBIA COSTÆSTRIGALIS. The Pinion-streaked Snout. B. M.

Crambus costæstrigalis, Haw. ? MSS.

Cledeobia costæstrigalis, Step. H. iv. 21, 1834. Wood, I. E. t. 27, f. 772.

Hypenodes leucopteralis, Guén.—teste Doub. (List, 14, 1850).

#### 325. SCHRANCKIA.

Schranckia, H. Schæff. p. 448. Hypenodes, Guén. MSS.—Doub.—(Zool. App. cv. 1850). SCHRANCKIA TURFOSALIS. The Marsh Oblique-barred. B. M. Schranckia turfosalis, Wocke, Zeitr. f. Ent. 1850, t. 5, f. 17.
 H.-Schæff. ii. 448, f. 620. Guén. Spec. Gen. viii. 43.
 Hypenodes humidalis, Doub.—Zool. App. vii. cv. 1850. Step. Cat. Brit. 234.
 Hypenodes Hibernicalis, Doub. MSS. (olim.).
 Pyralis biobliqualis, — MSS.

## Sub-F. III. AGLOSSIDI.

Aglossidi, Step. MSS. Aglossites, Dup. C. 210, 1846.

## 326. AGLOSSA.

Aglossa, Latr. H. iii. 414, 1802.

a. Euclita, Hüb. V. 347, 1816.

1. Aglossa pinguinalis. The Tabby.

B. M.

Phalæna-P. pinguinalis, *Linn. S. Nat.* i. 533, 1758. Aglossa pinguinalis, *Step. H.* iv. 23, 1834. *Wood, I. E.* t. 27, f. 775.

Var. a. Crambus pinguiculatus, Haw. L. B. 372, 1810.
Var. b. Pyralis Streatfeildii, Cur. B. E. x. t. 455, 1834.
Aglossa Streatfeildii, Step. H. iv. 24, 1834.

- b. Hypsopygia, p., Hüb. V. 348, 1816.
- Aglossa cuprealis. The Small Tabby.
   Hypsopygia cuprealis, Hüb. (V. 348, 1816).
   Pyralis Caprealis, Hüb. Py. t. 23, f. 153, 1796.
   Aglossa Caprealis, Step. H. iv. 23, 1834.
   Crambus Caprealist, Haw. L. B. 372, 1810.
   Aglossa cupræalis, Doub. (List, 13, 1850).

## 327. PYRALIS.

Pyralis, Linn. S. Nat. i. 533, 1758. Asopia, A., Treit. S. vii. 146, 1829.

## a. Pyralis, Linn. ut supra.

1. Pyralis farinalis. The Meal Moth.

B. M.

Phalæna-P. farinalis, Linn. S. Nat. i. 533, 1758. Pyralis farinalis, Step. H. iv. 25, 1834. Wood, I. E. t. 27, f. 778. Phalæna Pyralis, Fues. S. I. 41, 1775.

# b. Euclita, Hüb. V. 347, 1816.

PYRALIS GLAUCINALIS. The Double-striped.
 B. M. Phalæna-P. glaucinalis, Linn. S. Nat. i. 533, 1758.
 Pyralis glaucinalis, Step. H. iv. 26, 1834. Wood, I. E. t. 27, f. 780.

Phalæna nitidalis, Fab. M. I. ii. 219, 1787. Euchita incalidalis, Hub. (V. 347, 1816).

### 328. HYPSOPYGIA.

Hypsopygia, Hüb. V. 348, 1816. Agrotera? Step. (Cat. ii. 160, 1829).

1. HYPSOPYGIA COSTALIS. The Gold Fringe.

B. M.

Phalæna costalis, Fab. S. E. 644, 1775.
Hypsopygia costalis, Step. H. iv. 27, 1834. Wood, I. E. t. 27, f. 781.
Pyralis fimbrialis, Schiff. (W. V. 124, 1776).

### 329. AGROTERA.

Agrotera, Hüb. V. 348, 1816. Asopia, B., Treit. S. vii. 155, 1829. Endotricha, Zell.—teste H.-Schæff. iii. 12, 1847.

- AGROTERA FLAMMEALIS. The Common Rosy Flounced. B. M. Pyralis flammealis, Schiff. (W. V. 123, 1776).
   Agrotera flammealis, Step. H. iv. 28, 1834. Wood, I. E. t. 27, f. 782.
- AGROTERA NEMORALIS. The Rare Rosy Flounced.
   Agrotera nemoralis, Scop. 618. Hübn. 100, 206. Beytr. pl.
   Guenée, Spec. Gen. viii. 21. Dup. pl. 223, f. 6.

# 330. DOLYCHARTHRIA.

Delycharthria, Step. H. iv. 55, 1834. Stenia, Guén.—Dup. C. 202, 1846.

 DOLVCHARTHRIA PUNCTALIS. The Long-legged Pearl. B. M. Pyralis punctalis, Schiff. (W. V. 123, 1776). Treit. Healf, t 3, f. 9, 1834.
 Scopula longipedalis, Cur. B. E. viii. t. 312, 1830.

Margaritia? (Dolycharthria) longipedalis, Step. H. iv. 55, 1834. Asopia Ætnæalis, Dup. L. F. x. 199, t. 223, f. 4, 1831.

# Sub-F. IV. NYMPHULIDI.

Nymphulidi, Step. M.S.S. Nymphulites, Dup. C. 201, 1846.

# 331. DIASEMIA.

Diasemia, Hüb. V. 348, 1816. Prodelia, Guén.—Doub. (List, 13, 1850).

DIASEMIA LITERALIS. The Lettered China Mark.
 Pyralis literalis, Schiff. (W. V. 122, 1776).
 Diasemia literalis, Step. H. iv. 37, 1834. Wood, I. E. t. 28. f. 798.
 Phalæna argentalis, Fab. P. S. I. ii. 275, 1781.

# 332. HYDROCAMPA.

Hydrocampa, Latr. F. N. 478, 1825.

a. NAUSINOE, Hib. V. 362, 1816.

Hyrocampa Potamogata. The Brown China Mark. B. M. Phalæna-G. Potamogata, Linn. S. Nat. i. 529, 1758.
 Phalæna Potamogata, Don. B. I. ix. 9, t. 363, f. 1, 1806.
 Hydrocampa Potamogata, Step. H. iv. 38, 1834.

Pyralis Nymphæalis, Lang. V. ii. 210, 1782. Hüb. Py. t. 13, f. 85, 1796.

# b. Nymphula, Hüb. V. 362, 1816.

осамра Nумрнеата. The Beautiful China Mark. В. М. жпа-G. Nympheata, Linn. S. Nat. i. 529, 1758. госамра Nympheata, Step. H. iv. 39, 1834. West. & H. . ii. 97, t. 76, f. 21—23, 1843. жпа-G. nitidulata, Hüfn.—(Berl. M. iv. 618, 1770). lis Potamogalis, Hüb. Py. t. 13, f. 82, 1796. жпа stagnata, Don. B. I. xi. 10, t. 363, f. 3, 1806.

# c. Cataclysta, Hüb. V. 363, 1816.

DCAMPA LEMNATA. The Small China Mark. B. M. Ena-G. Lemnata, Linn. S. Nat. i. 529, 1758. cocampa Lemnata, Step. H. iv. 40, 1834. Wood, I. E. t., f. 801. Ena-G. gemmata, Hüfn.—(Berl. M. iv. 614, 1770). Ena Uliginata, Fab. E. S. iii. 2, 214, 1794.

### 333. PARAPOYNX.

poynx, Hüb. V. 362, 1816.

DYNX STRATIOTATA. The Ringed China Mark. B. M. Ena-G. Stratiotata, Linn. S. Nat. i. 529, 1758. poynx Stratiotata, Step. H. iv. 41, 1834. rocampa Stratiotata, Cur. B. E. xi. t. 495, 1834. ena paludata, Fab. E. S. iii. 2, 213, 1794.

## Sub-F. V. BOTYDI.

di, Step. MSS. tes, Dup. C. 205, 1846.

## 334. PHLYCTÆNIA.

ctænia, Hüb. V. 359, 1816. ea, p., Guén.—teste Doub. (List, 14, 1850).

TENIA SAMBUCALIS. The Garden China Mark. B. M. lis Sambucalis, Schiff. (W. V. 122, 1776). tænia Sambucalis, Step. H. iv. 42, 1834. Wood, I. E. t., f. 803.

### 330. DOLYCHARTHRIA.

Dolycharthria, Step. H. iv. 55, 1834. • Stenia, Guén.—Dup. C. 202, 1846.

DOLYCHARTHRIA PUNCTALIS. The Long-legged Pearl. B. M.
Pyralis punctalis, Schiff. (W. V. 123, 1776). Treit. Healf. t.
3, f. 9, 1834.
 Scopula longipedalis, Cur. B. E. viii. t. 312, 1830.
Margaritia? (Dolycharthria) longipedalis, Step. H. iv. 55, 1834.
Asopia Ætnæalis, Dup. L. F. x. 199, t. 223, f. 4, 1831.

# Sub-F. IV. NYMPHULIDI.

Nymphulidi, Step. MSS. Nymphulites, Dup. C. 201, 1846.

### 331. DIASEMIA.

Diasemia, Hüb. V. 348, 1816. Prodelia, Guén.—Doub. (List, 13, 1850).

DIASEMIA LITERALIS. The Lettered China Mark.
 B. M. Pyralis literalis, Schiff. (W. V. 122, 1776).
 Diasemia literalis, Step. H. iv. 37, 1834. Wood, I. E. t. 28, f. 798.
 Phalæna argentalis, Fab. P. S. I. ii. 275, 1781.

#### 332. HYDROCAMPA.

Hydrocampa, Latr. F. N. 478, 1825.

- a. NAUSINOE, Hüb. V. 362, 1816.
- HYROCAMPA POTAMOGATA. The Brown China Mark. B. M. Phalæna-G. Potamogata, Linn. S. Nat. i. 529, 1758.
   Phalæna Potamogata, Don. B. I. ix. 9, t. 363, f. 1, 1806.
   Hydrocampa Potamogata, Step. H. iv. 38, 1834.
   Pyralis Nymphæalis, Lang. V. ii. 210, 1782. Hüb. Py. t. 13, f. 85, 1796.

## b. Nymphula, Hüb. V. 362, 1816.

HYDROCAMPA NYMPHEATA. The Beautiful China Mark. B. M. Phalæna-G. Nympheata, Linn. S. Nat. i. 529, 1758.
 Hydrocampa Nympheata, Step. H. iv. 39, 1834. West. & H. M. ii. 97, t. 76, f. 21—23, 1843.
 Phalæna-G. nitidulata, Hüfn.—(Berl. M. iv. 618, 1770).
 Pyralis Potamogalis, Hüb. Py. t. 13, f. 82, 1796.
 Phalæna stagnata, Don. B. I. xi. 10, t. 363, f. 3, 1806.

## c. CATACLYSTA, Hüb. V. 363, 1816.

Hydrocampa Lemnata. The Small China Mark.
 Phalæna-G. Lemnata, Linn. S. Nat. i. 529, 1758.
 Hydrocampa Lemnata, Step. H. iv. 40, 1834. Wood, I. E. t. 28, f. 801.
 Phalæna-G. gemmata, Hüfn.—(Berl. M. iv. 614, 1770).

Q. Phalæna Uliginata, Fab. E. S. iii. 2, 214, 1794.

## 333. PARAPOYNX.

Parapoynx, Hüb. V. 362, 1816.

1. PARAPOYNX STRATIOTATA. The Ringed China Mark.
Phalæna-G. Stratiotata, Linn. S. Nat. i. 529, 1758.
Parapoynx Stratiotata, Step. H. iv. 41, 1834.
Hydrocampa Stratiotata, Cur. B. E. xi. t. 495, 1834.
Phalæna paludata, Fab. E. S. iii. 2, 213, 1794.

# Sub-F. V. BOTYDI.

Botydi, Step. MSS. Botytes, Dup. C. 205, 1846.

#### 334. PHLYCTÆNIA.

Phlyctænia, Hüb. V. 359, 1816. Ebulea, p., Guén.—teste Doub. (List, 14, 1850).

 PHLYCTENIA SAMBUCALIS. The Garden China Mark. B. M. Pyralis Sambucalis, Schiff. (W. V. 122, 1776). Phlyctenia Sambucalis, Step. H. iv. 42, 1834. Wood, I. E. t. 28, f. 803.

### 335. EURRHYPARA.

Eurrhypara, Hüb. V. 360, 1816. Botys, Step. (Cat. ii. 164, 1829). Ostreophana, Sodoff.—(Bull. S. I. Mosc. 19, 1837).

EURRHYPARA URTICATA. The Small Magpie.
 Phalæna-G. Urticata, Linn. F. ii. No. 1297, 1761.
 Eurrhypara Urticata, Step. H. iv. 44, 1834. Wood, I. E. t. 28, f. 805.
 Phalæna Hortulata, Linn. S. Nat. i. 529, 1758.

## 336. EBULEA.

Ebulea, Guén.—Doub. (List, 14, 1850).

- a. ECPYRRHOBRHOE, Hüb. V. 356, 1816.
- 1. EBULEA VEBBASCALIS. The Rusty China Mark.

  Pyralis Verbascalis, Schiff. (W. V. 121, 1776).

  Margaritia Verbascalis, Step. H. iv. 54, 1834.

  Pyralis arcualis, Hüb. Py. t. 12, f. 80, 1796.

  Margaritia (ochrealis), Wood, I. E. t. 28, f. 820.
  - b. Sitochroa, p., Hüb. V. 356, 1816.
- EBULEA CROCEALIS. The Small Straw China Mark.
   Pyralis crocealis, Hüb. Py. t. 11, f. 71, 1796.
   Pyralis ochrealis, Haw. L. B. 381, 1812.
   Margaritia ochrealis, Step. H. iv. 53, 1834.
   Margaritia (Verbascalis), Wood, I. E. t. 28, f. 824.

#### 337. NASCIA.

Nascia, Cur. B. E. xii. fo. 559, 1835. Epicorsia, p., Hüb. V. 355, 1816. Duponchelea, Zell.—teste H.-Schæff. iii. 8, 1847.

Nascia cilialis.* The Orange Cloud.
 Pyralis cilialis, Hüb. Py. t. 18, f. 119, 1796.
 Margaritia cilialis, Step. H. iv. 53, 1834.

Nascia cilialis, Cur. B. E. xii. t. 559, 1835. Var. a. Botys Catalaunalis, Dup. L. F. x. 330, t. 232, f. 8, 1832.

#### 338. UDEA.

Udea, Guén.—Dup. C. 209, 1846.

1. UDEA FERRUGALIS. The Rusty Dot.

B. M.

Pyralis ferrugalis, Hüb. Py. t. 9, f. 54, t. 23, f. 150, 1796. Margaritia ferrugalis, Step. H. iv. 53, 1834. Wood, I. E. t. 28, f. 822.

Var. a. Margaritia fulvalis, Step. H. iv. 54, 1834. Wood, I. E. t. 28, f. 823.

## 339. MECYNA.

Mecyna, Guén.—Doub. (List, 14, 1850). Mesographa, p., Hüb. V. 354, 1816.

1. MECYNA ASINALIS. The Dusky Pearl.

B. M.

Pyralis asinalis, Hüb. Py. t. 29, f. 185, 1797. Margaritia asinalis, Step. H. iv. 47, 1834. Wood, I. E. t. 28, f. 808.

#### 340. NOMOPHILA.

Nomophila, Hüb. V. 368, 1816. Stenopteryx, Guén.—Doub. (List, 14, 1850).

1. Nomophila Noctuella. The Rush Veneer. B. M.

Pyralis Noctuella, Schiff. (W. V. 136, 1776). Pyralis hybridalis, Hüb. Py. t. 17, f. 114, 1797. Nomophila hybridalis, Step. H. iv. 312, 1834. Wood, I. E. t. 47, f. 1476.

### 341. BOTYS.

Botys, Latr. R. A. 573, 1818. Margaritia, Step. (Cat. ii. 164, 1829). Id. H. iv. 46, 1834.

a. Epicorsia, Hüb. V. 355, 1816.

1. Botys Verticalis. The Mother-of-Pearl. B. M. Phalæna Verticalis. Linn. S. Nat. i. 533, 1758.

Margaritia Verticalis, Step. H. iv. 48, 1834. Wood, I. E. t. 28, f. 810. Epicorsia Iridialis, Hüb. (V. 355, 1816).

*2. Botys perpendiculalis. The Scarce Mother-of-Pearl.

Botys perpendiculalis, Dup. L. F. x. 324, t. 232, f. 5, 1831.

Margaritia centrostrigalis, Step. H. iv. 49, 1832. Wood, I. E. t. 28, f. 811, Q.

3. Botys pandalis. The Bordered Pearl.

Epicorsia pandalis, Hüb. (V. 355, 1816).
Pyralis Verbascalis, Hüb. Py. t. 9, f. 59, 1796.
Botys Thapsalis, Treit. (S. vi. 2, 314, 1828).
Margaritia Thapsalis, Step. (Cat. ii. 165, 1829). Step. H. iv. 50, 1834.

Pyralis angustalis, Haw. L. B. 379, 1812.
 Margaritia angustalis, Step. H. iv. 51, 1834. Wood, I. E. t. 28, f. 816.

Pyralis terminalis, Haw. L. B. 379, 1812.
 Margaritia terminalis, Step. H. iv. 51, 1834. Wood, I. E. t. 28, f. 816.

b. Hapalia, Hüb. V. 355, 1816.

4. Botys Hyalinalis. The Scarce Pearl. B. M. Pyralis hyalinalis, Hüb. Py. t. 11, f. 74, 1796. Margaritia hyalinalis, Step. H. iv. 51, 1834. Wood, I. E. t. 48, f. 814.

BOTYS FLAVALIS. The Gold China Mark.
 Pyralis flavalis, Schiff. (W. V. 121, 1776).
 Margaritia flavalis, Step. H. iv. 52, 1834. Wood, I. E. t. 48, f. 819.

c. Perinephila, Hüb. V. 357, 1816.

BOTYS SILACEALIS. The Dingy Pearl.
 Pyralis silacealis, Hüb. Py. t. 18, f. 116, 1796.
 Pyralis glabralis, Haw. L. B. 380, 1812.
 Margaritia glabralis, Step. H. iv. 52, 1834. Wood J. E. t. 28, f. 817.

7. Botys lancealis. The Long-winged Pearl.

B. M.

Margaritia lancealis, Step. H. iv. 48, 1834. Wood, I. E. t. 48, f. 809.

Pyralis lancealis, Schiff. (W. V. 121, 1776).

Pyralis elongalis, Haw. (Pr. 30, 1802). Pyralis longalis, Haw. L. B. 379, 1812.

Q. Pyralis glabralis, Hüb. Py. t. 18, f. 117, 1796.

8. Botys fuscalis. The Cinereous Pearl.

B. M.

Pyralis fuscalis, Schiff. (W. V. 121, 1776). Margaritia fuscalis, Step. H. iv. 56, 1834.

Wood, J. E. t. 48. f. 827.

Pyralis cineralis, Haw. L. B. 380, 1812.

Var. a. Margaritia pulveralis, Step. (Cat. ii. 166, 1829). Id. H. iv. 56, 1834. Wood, I. E. t. 48, f. 826.

Var. b. Margaritia fimbrialis, Step. (Cat. ii. 166, 1829). Id. H. iv. 56, 1834. Wood, I. E. t. 48, f. 828.

9. Botys Terrealis.* The Northern Pearl.

В. М.

Botys Terrealis, Treit. S. vii. 110, 1829. Pyralis Terrealis, Frey. N. B. v. 123, t. 456, 1845. Scopula borealis, Cur. (G. 175, 1831).

# 342. EPICORSIA.

Epicorsia, Hüb. V. 355, 1816. Spilodes, p., Guén.—Doub. (List. 14, 1850).

1. Epicorsia cinctalis. The Lesser Pearl.

B. M.

Botys cinctalis, Treit. S. vii. 97, 1829. Margaritia cinctalis, Step. H. iv. 49, 1834. Wood, I. E. t. 48, f. 812. Pyralis limbalis, Hüb. Py. t. 11, f. 72, 1796. Epicorsia verticalis, Hüb. (V. 356, 1816).

### 343. SITOCHROA.

Sitochroa, Hüb. V. 356, 1816. Spilodes, p., Guén.—Doub. (List, 14, 1850).

1. SITOTRIOA PALEALIS. The Sulphur. Pyralis palealis, Schiff. (W. V. 123, 1776). B. M.

Margaritia palealis, Step. H. iv. 50, 1834. Wood, I. E t. 48, f. 813.

## 344. RIVULA.

Rivula, Guén.—Dup. C. 206, 1846. Evergestis, p., Hüb. V. 354, 1816.

1. RIVULA SERICEALIS. The Straw Dot.

B. M.

Pyralis sericealis, Schiff. (W. V. 122, 1776).
 Margaritia sericealis, Step. H. iv. 58, 1834. Wood, I. E. t. 29, f. 832.
 Pyralis Leeana, Fab. G. M. 292, 1777.
 Noctua munda, Hüfn.—(Berl. M. iii. 296, 1769).

# Sub-F. VI. SCOPULIDI.

Scopulidi, Step. MSS. Scopulites, Dup. C. 203, 1846.

# 345. MESOGRAPHE.

Mesographe, Hüb. V. 354, 1816. Pionea, p., Guén.—Doub. (List, 14, 1850).

1. MESOGRAPHE FORFICALIS. The Garden Pebble.

B. M.

Phalana-P. forficalis, Linn. S. Nat. i. 533, 1758. Mesographe forficalis, Step. H. iv. 45, 1834. Wood, I. E. t. 29, f. 806.

# 346. EVERGESTIS.

Evergestis, Hüb. V. 354, 1816. Pionea, Guén.—Dup. C. 203, 1846.

 EVERGESTIS MARGARITALIS. The Clouded-yellow Pearl. B. M. Pyralis margaritalis, Schiff. (W. V. 123, 1776). Margaritia margaritalis, Step. H. iv. 57, 1834. Wood, I. E. t. 28, f. 831.

Phalæna extimalis, Scop. C. No. 614, 1763, Q. Pyralis erucalis, Hüb. Py. t. 9, f. 55, 1796.

### 347. PIONEA.

Pionea, Guén.—Dup. C. 203, 1846. Mesographe, p., Hüb. V. 354, 1816.

1. PIONEA STRAMENTALIS. The Chequered Straw.

B. M.

Pyralis stramentalis, Hüb. (V. 354, 1816).
Margaritia stramentalis, Step. H. iv. 57, 1834. Wood, I. E. t. 28, f. 830.
Pyralis elutalis, Hüb. Py. t. 10, f. 62, 1796. Haw. L. B. 378,

1812.

## 348. SPILODES.

Spilodes, Guén.—Doub. (List, 14, 1850). Uresiphita, p., Hüb. V. 353, 1816.

1. Spilodes sticticalis. The Diamond Spot.

**B.** M.

Phalæna-P. sticticalis, Linn. F. ii. No. 1354, 1761.

Margaritia sticticalis, Step. H. iv. 59, 1834. Wood, I. E. t. 29, f. 834.

Pyralis fuscalis, Hib. Py. t. 7, f. 45, 1796.

Pyralis tetragonalis, Haw. L. B. 385, 1812.

### 349. SCOPULA.

Scopula, Schr. F. B. ii. 2, 162, 1802. Sarodria, Sodoff.—(Bull. S. I. Mosc. 18, 1837).

# a. Scopula, Schr. ut supra.

1. SCOPULA ÆTIALIS. The Pale Straw.

B. M.

Scopula Etialis, Guén.—Doub. (List, 14, 1850).
Pyralis secalis, Haw. (Pr. 31, 1802).
Pyralis lutealis, Haw. L. B. 380, 1812.
Scopula institialis, Cur. (G. 175, 1831).
Margaritia institialis, Step. H. iv. 56, 1834. Wood, I. E. t. 28, f. 829.

# EURESIPHITA, p., Hüb. V. 353, 1816.

2. Scopula olivalis. The White-brindled.

B. M.

Pyralis olivalis, Schiff. (W. V. 123, 1776).

Margaritia olivalis, Step. H. iv. 59, 1834. Wood, I. E. t. 29, f. 835.

Pyralis umbralis, Hüb. Py. t. 8, f. 52, 1796, Pyralis nivealis, Haw. L. D. 385, 1812.

3. Scorula Prunalis. The Dusky Brindled.

B. M.

Pyralis Prunalis, Schiff. (W. V. 121, 1776).

Margaritia Prunalis, Step. H. iv. 56, 1834. Wood, I. E. t. 29, f. 836.

Pyralis leucophealis, Hüb, P Py. t. 12, f. 77, 1796, Pyralis nebulalis, Haw. L. B. 386, 1812.

Var. a.? Pyralis elutalis, Schiff. ? (W. V. 121, 1776). Pyralis albidalis, Hüb. ? Py. t. 18, f. 118, 1796.

4. Scopula Alpinalis. The Alpine Pearl.

B. M.

Pyralis alpinalis, Schiff.? (W. V. 123, 1776). Margaritia alpinalis, Step. H. iv. 50, 1834. Wood, I. E. t. 29, f. 833.

Scopula uliginosalis, Cur. ? MSS.

Margaritia uliginosalis, Step. (Cat. ii. 166, 1829).

# 350. CYNÆDA.

Cyneda, Hüb. V. 346, 1816. Odentia, Dup. L. F. x. 9, 1831. Scopula, A., Treit. S. vii. 54, 1829.

I. CYNEDA DENTALIS. The Starry Brindle.

B. M.

Pyralis dentalis, Schiff. (W. V. 120, 1776). Cyuada dentalis, Step. H. iv. 61, t. 33, f. 1, 1834. Phalana ramalis, Fab. M. I. ii. 220, 1787. Noctua radiata, Esp. S. iv. (374), t. 126, Nact. 47, f. 2, 3, 1788—95.

Noctua fulminans, Fab. E. S. iii. 2, 104, 1794.

# Sub-F. VII. ENNYCHIDI.

Ennychidi, Step. MSS. Ennychites, Dup. C. 196, 1846.

### 351. RHODARIA.

Rhodaria, Guén.—Dup. C. 199, 1846.

1. RHODARIA SANGUINALIS. The Scarce Crimson and Gold. B.M.

Phalæna-Py. sanguinalis, Linn. S. Nat. ii. 882, 1767. Pyralis sanguinalis, Hüb. Py. t. 6, f. 33, 1796. Pyralis cruentalis, Scrib. B. i. 59, 1790.

Var. a. Pyralis hæmatalis, Hüb. Py. t. 28, f. 178, 1797.

### 352. PYRAUSTA.

Pyrausta, Schr. F. B. ii. 2, 163, 1802.

- a. Porphyrites, Hüb. V. 349, 1816.
- Pyrausta purpuralis. The Crimson and Gold. B. M. Phalæna-Py. purpuralis, Linn. S. Nat. i. 534, 1758.
   Pyrausta purpuralis, Step. H. iv. 35, 1834. Wood, I. E. t. 27, f. 793.
   Pyralis punicealis, Hüb. Py. t. 6, f. 34, 1796.
- Pyrausta ostrinalis. The Scarce Purple and Gold. B. M. Pyralis ostrinalis, Hüb. Py. t. 17, f. 113, 1796.
   Pyralis punicealis, Haw. L. B. 239, 1812.
   Pyrausta punicealis, Step. H. iv. 36, 1834. Wood, I. E. t. 27, f. 795.
- 3. Pyrausta punicealis. The Purple and Gold. B. M. Pyralis punicealis, Schiff. (W. V. 317, 1776). Phalæna punicalis, Fub. E. S. iii. 2, 239, 1794. Pyralis porphyralis, Hüb. Py. t. 6, f. 36, 1796. Pyrausta porphyrialis, Step. H. iv. 35, 1834. Wood, I. E. t. 27, f. 794.

# b. LEIMONIA, Hub. V. 350, 1816.

4. PYRAUSTA CESPITALIS. The Straw Barred.

B. M.

Pyralis cespitalis, Schiff. (W. V. 123, 1776).

Pyrausta cespitalis, Step. H. iv. 34, 1834. Wood, I. E. t. 27, f. 791

Var. a. Pyralis sordidalis, Hüb. Py. t. 7, f. 40, 1796. Pyrausta sordidalis, Step. H. iv. 34, 1834. Wood, I. E. t. 27, f. 792.

## 353. ENNYCHIA.

Ennychia, Treit. (S. vi. 2, 318, 1828). Id. vii. 195, 1829. Pyrausta, Hüb. V. 351, 1816.

1. ENNYCHIA CINGULATA. The Silver-barred Sable. B. M. Phalæna-G. cingulata, Linn. S. Nat. i. 529, 1758. Ennychia eingulata, Step. II. iv. 32, 1834. Wood, I. E. t. 27, f. 788.

2. Ennychia anguinalis. The Wavy-barred Sable. B. M. Pyralis anguinalis, Hub. Py. t. 5, f. 32, 1796. Eunychia anguinalis, Step. H. iv. 32, 1834. Wood, I. E. t. 27, f. 789. Pyralis fascialis, Sehr. F. B. ii. 65, 1802.

# 354. ANANIA.

Anania, Hüb. V. 360, 1816. Ennychia, B., Treit. S. vii. 2, 200, 1829.

1. Anania octomaculata. The White Spot.

B. M.

Phalæna-G. octomaculata, Linn. M. 540, 1771. Anania octomaculata, Step. H. iv. 31, 1834. Wood, I. E. t. 25, f. 797.

Geometra funeraria, Müll Z. D. Pr. 132, 1773.

Phalæna atralis, Fab. S. E. 654, 1775. Pyralis guttalis, Schiff. (W. V. 194, 1776).

Noctua trigutta, Esp. S. iv. (564), t. 162, Noct. 84, f. 6, 1789 -98.

## Sub-F. VIII. TORTRICIDI.

Tortricidi, Step. MSS.

### 355. SIMAETHIS.

Simaëthis, Leach, E. E. ix. 135, 1815. Anthophila (Genus Hymenopt.), Haw. L. B. 471, 1812. Choreutes, Hüb. V. 373, 1816. Xylopoda, Latr. F. N. 476, 1825.

# a. Simaethis, Leach, ut supra.

- SIMAETHIS FABRICIANA. The Nettle-tap.
   Phalæna-To. Fabriciana, Linn. S. Nat. ii. 880, 1767.
   Simaëthis Fabriciana, Step. H. iv. 29, 1834. Wood, I. E. t. 27, f. 783.
   Tortrix Urticana, Schiff. (W. V. 132, 1776).
   Tortrix dentana, Hüb. To. t. 1, f. 4, 5, 1796.
   Asopia alternalis, Treit. (S. vi. 2, 317, 1825). Id. vii. 160, 1829.
- Phalæna-Ti. Oxyacanthella, Linn. S. Nat. ii. 886, 1767.
   Var. a. Anthophila dentana, Haw. L. B. 471, 1812.
- SIMAETHIS PARIANA. The Double-barred Nettle-tap. B. M. Phalæna-To. pariana, Linn. F. ii. No. 1341, 1761.
   Simaëthis pariana, Step. H. iv. 29, 1834. Wood, I. E. t. 27, f. 784.
- Var. a. Anthophila lutosa, Haw. L. B. 472, 1812.
  Simaëthis lutosa, Step. H. iv. 29, 1834. Wood, I. E. t. 27, f. 785.

# b. CHOREUTES, Guén. MSS.

3. SIMAETHIS ANGUSTANA. The Silver-dotted Nettle-tap. B. M. Tortrix angustana, Hüb. To. t. 32, f. 204, 1799? Choreutes scintilimana, Hüb. (V. 373, 1816). Pyralis Myllerana, Fab. ?—Haw. L. B. 472, 1812. Simaëthis Myllerana, Cur. B. E. vii. t. 320, 1830. Step. H. iv. 30, 1834.

Var. a. Anthophila punctosa, Haw. L. B. 472, 1812.

838.

Simaëthis punctosa, Step. H. iv. 30, 1834. (Myllerana), Wood, I. E. t. 27, f. 786.

4. SIMAETHIS VIBRANA. The Scarce Nettle-tap.

### 356. NOLA.

Nola, Leach, E. E. ix. 135, 1815. Roeselia, Hüb. V. 397, 1816.

Nola cristulalis. The Least Black Arches.
 Pyralis cristulalis, Hüb. Py. t. 3, f. 17, 1796.
 Pyralis strigulalis, Haw. L. B. 387, 1812.
 Nola strigulalis, Step. H. iv. 62, 1834. Wood, I. E. t. 29, f.

2. Nola strigula. The Small Black Arches. B. M.

Noctua strigula, Schiff. (W. V. 69, 1776). Pyralis monachalis, Huw. L. B. 387, 1812. Nola monachalis, Step. H. iv. 62, 1834. Wood, I. E. t. 387, f. 839.

3. Nola cucullatella. The Short Cloaked.

Phalæna-Ti. cucullatella, *Linn. S. Nat.* i. 537, 1758. Nola cucullatella, *Step. H.* iv. 62, 1834. *Wood*, *I. E.* t. 29, f. 840.

B. M.

Noctua palliola, Schiff. (W. V. 69, 1776). Var. a. Nola fuliginalis, Step. (Cat. ii. 168, 1829).

